The Mining Journal
RAILWAY AND COMMERCIAL GAZETTE
FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 379. --Vol. XII.] LONDON: SATURDAY, NOVEMBER 26, 1842. [Price 6d.

STANNARIES OF CORNWALL.
IN THE VICE-WARDEN'S COURT.
"FOX AND OTHERS v. WILLIAMS."—"FOX AND OTHERS v. SAME."

WHEREAS the Vice-Warden did, by two several orders or decrees made in the above-mentioned causes, and bearing date respectively the 8th of November, 1841, order that a sale be made of (amongst other things) the MACHINERY and MATERIALS upon and belonging to WHEAL HENRY MINE, in the parish of Wendron, within the said Stannaries, under the direction of the Registrar of the Court, and that the proceeds of such sale should be applied by the said Registrar in the manner directed by the same orders or decrees; notice is hereby given, that, pursuant to the said several orders or decrees, a PUBLIC AUCTION will be holden at Wheal Henry Mine aforesaid, on Tuesday, the 29th day of November inst. and following day, at Eleven o'clock in the forenoon of each day, for selling, either together or in lots, the undermentioned

MINING MACHINERY AND MATERIALS,

viz.:—A 40-inch cylinder pumping-engine, nearly new, with a boiler nine tons, and capstan and shears, capstan rope; sixty fathoms 10-inch, eighty fathoms of 2½ and 1¼ iron flat-rods, with iron pendulums, pins, and wood stands; three horse whims; three shaft bobs, complete.—The following pumps:—16-feet 10-inch, 16-feet 8-inch; working barrels of 9, 10, 7½, and 7-inch; bucket doorpieces of 9, 8, 7, and 6-inch; windbores of 12, 9, 8, 6, and 5-inch; plunger case; stuffing box and glands of 12, 10, and 9 inch; H-piece and tap-door of 12, 9, and 8-inch; plunger pole 11½, 9, and 7-inch; a pair of strapping plates; shaft and bucket rods—a quantity of staples and glands, rod and flanch bolts, pump rings, a quantity of useful iron, several 12, 9, and 8-inch connection-rods, launders, windlasses, barrows, winze kibbles, ladders, a large quantity of 1, 2, and 3 inch plank, half and quarter timber, old brass, bucket prongs, brasses, a lot of miners' and smiths' tools, anvil, vice, smiths' bellows, 41-inch, screw tackle and stocks, brass bell and stand, three large blocks, iron, nails, old junk, &c. &c.

For viewing the same, application may be made to Captain Perry, at the mine; and for further particulars (if by letter pre-paid) to Mr. Roberts, solicitor, Truro.

Dated the 10th day of Nov.

HENDREFORGAN, Glamorganshire.—TO BE SOLD, BY AUCTION, by Mr. THOMAS GLOVER, at the Cameron Arms Inn, Swansea, on Friday, the 9th day of December next, at Twelve o'clock at noon, a very SUPERIOR HIGH-PRESSURE STEAM-ENGINE, of 40-horse power, in perfect repair, with boilers, winding apparatus, pumps, pumping-bobs, rods, ropes, and chains complete; nine 8-inch 9-ft. pipes; one 25-fathom lift of 11-inch pipes; one flat rope; sixty fathoms Memel rods, strapping, plates, &c.

The whole of the above will be *positively sold*, and further particulars may be obtained on application to the Auctioneer, at Swansea, aforesaid.

Dated Nov. 21.

FREEHOLD LAND AND VALUABLE MINERAL PROPERTY, in the Swansea Valley, on the border of Breconshire, FOR SALE.—TO BE SOLD, BY AUCTION, at the Mackworth Arms Inn, Swansea, on Saturday, the 17th of December (between the hours of Two and Four o'clock in the afternoon), by Mr. B. BROUGH, all that FREEHOLD ESTATE, called WERNQURLAIS FARM, in the parish of Ystradgunlais, in the county of Brecon. It is situated on the southern side of the River Tawe, within a quarter of a mile of the Swansea Canal and thirteen miles of the port, and contains, by admeasurement, 101 statute acres (more or less) of pasture and meadow land, with a right of common on the adjacent mountain, together with all the rich, valuable, and abundant MINERALS therein contained. This estate, in proportion to its extent of surface, possesses, perhaps, a greater quantity of valuable products than almost any other property to be met with in this rich and important mineral basin; it has been carefully examined by very eminent mining engineers, who report that all the veins of stone coal and iron mine exist here which are to be found in Breconshire or Glamorganshire—indeed, from its peculiar situation, many of the upper veins, not found in neighbouring lands, are actually worked by the lessees under the Wernqurlais estate. A great part of these valuable minerals are workable by level, and the depth is exceedingly moderate to the lower veins, which were opened under this estate in 1832. The aggregate thickness of coal reported amounts to 30½ feet, and 102½ inches of iron mine, or ore. An important feature in this property to capitalists is, that the lease under which the land is let, at the low rent of £20 per annum, is determinable at the death of the present occupant—a woman, aged seventy-six years, when there is little doubt (from the vast improvements which have taken place in the neighbourhood) but that a rental of nearly treble that amount may be safely relied on; but more important still is the fact, that the whole of the minerals are under lease to the Yniscedwyn Iron Company for a term of ninety-nine years (five of which have only expired), at a sleeping rent of £100 per annum for that period. The galeage, or royalty, they pay the proprietor of the land is 7d. per ton for coal and iron mine, or ore, and 3d. per ton for all clay and sand; although the minerals have been so few a number of years in the present lessees hands, it appears, by recent investigation, that the result of the workings are now at the rate of £200 per annum, with a certain prospect of a still greater return. The value of minerals leased to so prosperous and able an ironmaster as George Crane, Esq., the managing partner of the Yniscedwyn Iron-Works, needs no comment.

For further particulars apply to Messrs. W. Brough and Son, Mineral Engineers, Neath; to W. Morgan, Esq., Solicitor, Bridgend, Glamorganshire; or to Mr. B. Brough, Auctioneer, Pontypool.

FOR SALE, BY CONTRACT, ONE SHARE, or ONE HUNDREDTH PART, in GOGINAN MINE, in Cardiganshire.—This is one of the richest mines in the Principality; it is situate seven miles from the shipping port and watering place of Aberystwyth. The profits are considerable, with every prospect of their being increased; the ore ground is nearly a quarter of a mile in length, and every fathom that has been taken away has yielded upwards of £40 worth of silver and lead, and there is now drained, at twenty fathoms under the adit, upwards of £100,000 worth of ore.—(The returns for the present year have been 200 tons per month.)—Applications for price to be made to the Editor of this Journal, Fleet-street, London.

TO BE SOLD, for £120, an excellent 16-horse power CONDENSING STEAM ENGINE, made by Messrs. Boulton and Watt, with all the modern improvements, metallic packing, &c. It is offered at the above nominal price as it must be removed from the premises where it is at present erected, the lease having expired.—Apply to Mr. Thomas William Stevens, 47, James's-street, Dublin, where the engine can be inspected.—*** It will be put on board ship or steamer (free of expense) for the purchaser.

VALUABLE COLLIERY, NEAR SWANSEA, TO BE LET, consisting of a bed of coal, five feet ten inches thick, partly opened from the crop; this burning coal is much request for steam packets, as also an excellent fuel for household purposes, being free from sulphur. This vein lies under about [illegible] acres of land, and within less than 100 yards of the Swansea Canal, and about six miles from the harbour. It may be opened for the obtaining a large annual quantity of coal at a very moderate outlay.—For particulars, apply to William Brough and Son, mining engineers, Neath, Glamorganshire.

SHAFTING, &c.—TO BE SOLD, about FIFTY FEET of STRONG SHAFTING and DRUMS, with plummer blocks, brasses, &c., complete, and in excellent order.—For further particulars, apply to Mr. Haythornth[illegible], [illegible], Stroch-street, New-road.

TO BE SOLD, CHEAP, TWO very COMPLETE SETS of HOT-BLAST PIPES.—Apply to the Ystalyfera Iron Company.

AN OPPORTUNITY TO REALISE LARGE PROFITS.—The German States have lately resolved the construction of about 120 geographical miles of iron railways; for executing this gigantic undertaking, the term of seven years has been deemed sufficient. The kingdoms of Prussia, Saxony, Bavaria, and Wurtemberg, the Hessian and the Thuringian States alone, have to construct tracts to the total length of 120 geographical miles (about 550 English statute miles), at the expense of about [illegible] ([illegible] sterling); for these tracts [illegible] tons of rails are wanted.—Mr. S. MEYER, proprietor of mines and ironworks, residing at HILDBURGHAUSEN, in Saxony, wishes to associate with respectable persons of this country, in a JOINT-STOCK COMPANY, for the erection, in Germany, of an IRON-RAIL MANUFACTORY, on a scale sufficient to produce [illegible] tons of rails every year. The capital wanted is £[illegible]; the yearly net profits on which will amount to [illegible] per cent., besides 5 per cent. interest. These [illegible] are calculated on the average rail price now current in the centre of Germany [illegible], £11 sterling per ton, duty paid, and on fixed rates, at which Mr. Meyer, the proprietor of very extensive coal and iron mines, will ENGAGE to DELIVER to the company all the MATERIALS WANTED for a SERIES of YEARS. He will also PROVIDE for the BUILDING GROUNDS in a most eligible situation, where hands are cheap and in abundance, close to one of the principal rail[ways] [illegible], in the very centre of Germany and of all the markets; he will [illegible] FURNISH a never-failing WATER POWER, of about [illegible] horses; he will CONTRACT with the company for the CONSTRUCTION of all the BUILDINGS, machinery included, and engage to have them completed, put in work, and delivered to the company within three years from date of contract.

The total yearly produce of rails in Germany amount, at present, to [illegible] tons only, so that, in spite of a heavy protecting duty of £[illegible] (about [illegible]) sterling per ton on all foreign rails, and the large expenses incurred by freight, commission, and other charges, immense quantities of rails are yearly imported, as English and Belgian manufactures, to cover the demand, continually increasing, for the railways now constructing. These facts, universally known, show clearly the [illegible] and the fair prospects of the proposed undertaking.

[illegible] to be directed to S. Meyer, Esq., Principal of the Bibliographical Institute, Proprietor of Mines and Manufactories, at Hildburghausen, in Saxony.

HENRY THOMAS, MINING AGENT and MINERAL SURVEYOR, No. 6, GEORGE-YARD, LOMBARD STREET, LONDON.—Mining agencies undertaken, mineral property surveyed, and reports, plans, &c., prepared on moderate terms. Office of consultation on mining operations, reference for information on mines and quarries, arrangement of mining accounts, and for the purchase and sale of mineral property and shares.

N.B.—Parties desirous of making PURCHASES in MINES and QUARRIES will obtain correct information at this office.

SHARES IN CORNISH AND OTHER MINES BOUGHT, SOLD, or EXCHANGED, on COMMISSION; Mines inspected by first-rate practical miners; specimens of the ores of the various mines to be seen, and every information given, on application to William Tregelly, jun. (from Redruth, Cornwall), at his offices, 50, Threadneedle-street, London.

N.B.—A quantity of Black Jack for Sale.

TO BE DISPOSED OF, EIGHT SHARES in a LEAD MINE, in CARDIGANSHIRE, which holds out great advantages; now in active working, and returning profit. The operations at the mine are capable of being considerably extended, and the sett extensive. The mine is divided into 128 parts, or shares.—Address, in the first instance, "G. P.," care of the Editor of the *Mining Journal*, 1, Crane-court, Fleet-street, when further information will be afforded, and an appointment made.

ANGLO-MEXICAN MINT COMPANY.—The shareholders of this company will please to take notice, that a DIVIDEND of TWELVE SHILLINGS per share will be PAYABLE on and after the 1st of December next. Claims to be made three clear days previous to payment, printed forms of which are to be obtained at the office.—Hours of attendance Eleven to Three.

Office of the Anglo-Mexican Mint Company, 9, New Broad-street, London, Nov. 16. G. B. LONSDALE.

MEXICAN AND SOUTH AMERICAN COMPANY.—Notice is hereby given, that a SPECIAL MEETING of the proprietors of shares in the Mexican and South American Company will be held at the office of the Anglo-Mexican Mint Company, 9, New Broad-street, on Wednesday, the 7th day of December next, at Two o'clock precisely. H. W. SCHNEIDER, Managing [illegible].

10, New Broad-street Mews, Nov 17.

LONDON AND BIRMINGHAM RAILWAY—FINAL CALL of £10 on the £100 shares.—The directors of the London and Birmingham Railway Company having resolved that a THIRTEENTH or FINAL INSTALMENT of £10 per share, payable on or before the 14th of January, 1843, should be called for on the £100 shares of this company, the proprietors of such shares are hereby required to PAY, on or before the appointed day, to any one of the under-mentioned bankers, the sum of £10 on each of their respective shares—viz.:

London—Messrs. Glyn and Co., 67, Lombard-street; or at the office of the company, Euston-square.

Birmingham—Messrs. J. L. Moilliet and Son; or the Birmingham Banking Co.

Liverpool—The Bank of Liverpool.

Manchester—Sir B. Heywood and Co.

The bankers have been severally instructed to charge interest at the rate of 5 per cent. per annum (according to the provisions of the Act of Incorporation) on all sums which shall be tendered after the 14th of January.

GEORGE CARR GLYN, Chairman } Of the board of
J. F. LEDSAM, Deputy-Chairman } directors.

Nov. 11. By order, R. CREED, Secretary.

BOLTON AND PRESTON RAILWAY COMPANY. TENDERS FOR LOANS ON MORTGAGE.—The directors of this company are prepared, under powers of their Acts of Parliament, to RECEIVE TENDERS for the LOAN of MONEY, in sums of not less than £[illegible], and for terms of three, five, seven, or ten years, and to GRANT MORTGAGES of the said undertaking, and of the rates, tolls, or monies arising therefrom, as securities for such loans, bearing interest at the rate of 5 per cent. per annum. INTEREST WARRANTS, for the whole term for which the loan shall be made, will be delivered to the lenders along with the mortgages, and be made payable half-yearly, at the company's bankers in London, or Bolton, as may be preferred. The tenders are to express the sums and the term of years for which the same are proposed to be lent, and to be addressed to the secretary, at the company's office, Bolton.

By order of the board of directors,

Bolton, August 30. PETER SINCLAIR, Secretary.

BRISTOL AND EXETER RAILWAY.—Notice is hereby given, that, in pursuance of a resolution of the last General Meeting of proprietors, the directors of this company are ready to RECEIVE TENDERS of LOANS of MONEY, in sums of not less than £[illegible], and for terms of not less than three, nor more than seven years, on security of LOAN NOTES under the corporate seal of the company, bearing interest at the rate of 5 per cent. per annum, payable half-yearly. Tenders, expressing the sum, the term of years, and the residence of the lender, to be addressed to the secretary. By order of the board of directors,

Bristol office, 20, Broad-street, Oct. 14. J. B. BADHAM, [illegible].

Interest warrants will accompany the loan notes.

TO INVENTORS AND PATENTEES.—Having united the profession of obtaining Patents for Inventions, and supplying Drawings and Specifications for the same, entering Caveats, registration of Designs according to the amended Act with that of the practice of a Civil Engineer, such as making Original Designs and Detailed Drawings for all kinds of Engineering Works and Machinery, Surveying, Reports, Estimates, Arbitrations, and Valuations (in which, having had twenty years' Actual Practice in most important works, as also in the application of the mechanical sciences to the various arts of life), I am enabled to make a considerable reduction in the usual charges, and materially to assist mechanical inventors in their designs and arrangements, and to execute all commissions with accuracy and dispatch. J. R[illegible].

38, Chancery-lane.

OFFICE FOR PATENTS OF INVENTIONS AND REGISTRATION OF DESIGNS, 14, LINCOLN'S-INN-FIELDS.—Inventors and capitalists are informed, that all business relating to the securing and disposing of BRITISH and FOREIGN PATENTS, Preparation of Specifications, and Drawings of Inventions, is expeditiously and economically effected. Also Registrations under the new Consolidated Copyright of Designs Act, 5 and 6 Vic., cap. 100.—A prospectus, containing much useful information, may be obtained, and reference to an alphabetical list of patents and registrations made, on application to

Mr. ALEXANDER PRINCE, 14, Lincoln's-Inn-Fields.

On the 1st December will be published, price 2s. 6d.

NEWTON'S LONDON JOURNAL OF ARTS AND SCIENCES.—No. CXXXII., illustrated by Three Copperplate Engravings: containing reports of twenty-two Specifications on the following subjects:—Improvements in Rotary and other Steam Engines—Steam Boats—Furnaces—On Manufacturing Iron—Smelting Copper Ores—Casting Type—Improvements in Inkstands—Manufacturing Soda—Preparing Wool—Drawing Yarns and Cloth—Regulating and Burning Gas—Daguerreotype Process—Depositing Metals—Fire Arms—Scientific Adjudication, "Brown v. Annandale," with Remarks as to the probable effects of the Decision on existing Scotch Patents—Transactions of the Civil Engineer's Society—Lists of English, Scotch, and Irish Patents, and Celestial Phenomena.—Published monthly, at the Office for Patents, 66, Chancery-lane, [illegible] and Townhall-buildings, Manchester; Sherwood and Co., and Simpkin and [illegible].

On November 24, was published, price 1s.

THE MECHANIC'S ALMANAC and ENGINEER'S YEAR BOOK, for 1843.—Besides a complete Calendar and Ephemeris, and all the customary tables for the year, this almanac will contain a great variety of articles of peculiar interest to mechanics and engineers, including, among others, a classified List of all Patents for New Inventions granted during the past year—Abstract of the New Copyright of Designs Act, with Instructions for Registration, Table of Fees, &c.—Improvements in the Construction and Internal Regulation of Factories—State of Labour in the Coal, Iron, Copper, Lead, and Zinc Mines and Works, with Abstract of Lord Ashley's Act for Abolishing the Employment of Females and Children—Table of the Strength and other Properties of British Irons—Table of Approved Proportions of Steam-Engines—Table of the Delivering Capacities of Gas Mains, the Dimensions and Prices of Service and Consumers, Meters, the Weight and Price of Bushes Pipes, &c.—Table of British Sailing Vessels and Steamers—Table of the Velocities of Steam Vessels—Table of the Tonnage, Dimensions, &c., of the present Crack Ships of the Royal Steam Navy—Admiralty Regulations respecting the Appointment, Pay, Allowances, &c., of Engineers in the Royal Steam Navy—Revenue of the Real Property, in Lands and Houses, of England and Wales—Produce and Returns of English and Foreign Mines for 1841—Return of the Number of Publications, and Savings' Bank Depositors—Population, Health, and Mortality Tables—Laws for Regulating the Weight and Quality of Bread, &c.—Printed for the Company of Stationers, and sold by George Greenhill, at their Hall, in Ludgate-street.

CALEDONIAN AND CITY OF LONDON INFIRMARY, [illegible], ALDERSGATE STREET.

For the definitive CURE of RUPTURES, &c., so as to enable the patient to leave off a truss entirely; and, by timely application, great inconvenience may be avoided. Cures in long standing ruptures [illegible] in effecting the cure, but the power to [illegible] certain, and no truss [illegible]. The only thing of the kind in the United Kingdom. Dr. Thomson, proprietor of the above institution, [illegible], and is consulted with advantage in most other diseases [illegible]. Patients may be attended at their residence, if required, to the distance of [illegible] miles from London.—Hours of attendance from Ten to Four o'clock. [illegible] paid, &c.

MR. ANDREW KURTZ'S PATENT FUEL.—This FUEL has been TESTED, on a large scale, at Woolwich, by her Majesty's Commissioners, and found, on trial, that 1 lb. of it evaporates 9½ lbs. of water. The following STATEMENT is particularly recommended to the notice of all engaged in steam navigation and the use of fuel generally:—

COMPARATIVE ADVANTAGES OF MESSRS. CASE & KURTZ'S PATENT FUEL OVER COAL FOR STEAMERS ON THE ATLANTIC AND PACIFIC OCEAN.

No spontaneous combustion ever can take place, which, in coals, frequently happens, on account of the sulphur.

The Patent Fuel is free of all sulphur, thereby saving the boilers from oxydation, and the bars from burning.

It gives very little ash, and no smoke, when properly fired.

One hundred tons of this fuel will give as much steam as 130 of coal, and occupy only as much room as eighty tons of coal; it never gets soft in the hottest climates, but remains solid, like coal.

100 tons of coal to Singapore, cost 10s. per ton	£50	} £[illegible]
Freight, at 30s. per ton	150	

Loss from decomposition, during the voyage and transport, from 20 to 30 per cent.—say, only 20—leaves 80 from the 100; now, sixty tons of Patent Fuel is equal, in steam-power, to eighty tons of coal; therefore, sixty tons of the fuel, at 40s. = [illegible] 75 by 30 for freight—total 115 lbs. saving in using the Patent Fuel—£85 on every 100 tons of coal.

To the East Indies (at Aden station) the advantage of the fuel over coal will be £[illegible]; to Suez £[illegible], and to the west coast of South America £[illegible], over every 100 tons of coal; but the greatest advantage is in the stowage, when freight on goods is high—[illegible] tons of Patent Fuel being equal to 1000 tons of coal—thus leaving room for 400 tons of other goods.—Liverpool, Nov. 22.

ANDREW SMITH'S PATENT WIRE ROPE.
TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In consequence of several reports and rumours having been circulated by my late partner, Mr. E. Mathews, who no longer has any interest in the patents secured by me, for the causes assigned in the communication advertised you last week, I think it my duty to state, that legal measures have already been taken by me, and, under which circumstances, I do not feel it necessary to enter into any explanation, nor shall I attempt recrimination. As a matter of private difference, arising from his conduct, whereby the act of dismissal on my part, of that gentleman from all further interest or interference with my business, was rendered necessary, I do not consider that the public, and more especially the consumers of the article, can feel any interest, except the knowledge that there is not the slightest interference with the manufacture of the article. It, however, becomes me fully to contradict the assertions made by Mr. Mathews, as being alike due to my character, as well as to my interests in a commercial point of view. As the subject is now submitted to legal decision, I feel it only right—for the information of those embarked in mines, railways, and also the shipping interest, that the patent wire rope, standing rigging, and lightning conductors, continue, as heretofore, to be manufactured by me, at the works, at Millwall, to which place, to my offices, 7, White Lion-court, Cornhill, or to any agent in the mining districts or shipping ports, any orders addressed, will be punctually executed. The superior advantages of wire rope over that of hempen manufacture, which is now universally admitted, render it unnecessary for me to occupy further space than to refer to the comparative cost and strength of the two materials, as demonstrated in my letter addressed you, and inserted at page 373, last week. Its application by Government, and also on several lines of railway, in the mines of Cornwall, and in the north, afford the best evidence of its superiority. I am, Sir, Your's, &c.,

Patent Wire Rope Works, Millwall, Nov. 22. ANDREW [illegible].

ANDREW SMITH'S PATENT WIRE ROPE.
TO THE EDITOR OF THE MINING JOURNAL.

Sir,—To our surprise we find, in your Journal of the 19th instant, an advertisement respecting Mr. E. Mathews, of the firm of A. Smith and Co., containing certain allegations against that gentleman. We cannot imagine that you could have, at the time, been aware of the contents of that advertisement—we, indeed, hope not, as the insertion of it exposes you to a criminal information, or to an action for damages. We call upon you, on the part of Mr. Mathews, to insert, in the next Number of your Journal, this letter, in which, as Mr. Mathews' solicitors, we deny the truth of the assertions contained in the advertisement, and inform you that proceedings are in progress in the Court of Chancery to protect Mr. Mathews and his property from the acts, as well as the insinuations, of Mr. Andrew Smith.

Bedford-row, November 22. RICHARDSON & T[illegible].

IMPERIAL SLATE COMPANY.
Capital £150,000, in 15,000 shares of £10 each.—£5 paid.

DIRECTORS.
WILLIAM R. COLLETT, Esq., M.P. Chairman.

R. E. Arden, Esq.	Geoffrey Nightingale, Esq.
James Clay, Esq.	John Parker, Esq.
Hon. R. E. Howard.	Henry Scrope, Esq.

AUDITORS.

W. H. Tyrell, Esq.	S. Sanders, Esq.

Standing Counsel—F. W. Slade, Esq.
Solicitors—Messrs. Barnes, Winter, and Bernard, 7, Great Winchester-street.
Resident Manager—Mr. George Cleary, Killaloe.
Secretary in London—Mr. W. Hassock.
Secretary in Ireland—Mr. Thomas Mosley.
Bankers—The Commercial Bank of London and the Provincial Bank of Ireland.
Offices—5, Robert-street, Adelphi; and Derryville and Curraghbally, Killaloe.

Agreeably to the suggestion of several influential shareholders, the directors of the Imperial Slate Company have issued the following statement, in anticipation of the general meeting in December next:—Nearly four years have elapsed since the company was first organised; but it was only after the purchase of the King Company's interests, in the spring of 1841, that the great value of the undertaking became apparent. Every thing, since that period, has progressed in a most satisfactory manner; the sales and produce have rapidly increased, whilst the local expenses have been considerably reduced. So great has been the demand for Killaloe slates since the marked improvement in their manufacture took place, that upwards of £7000 worth have been sold at the quarries and depôts during the late building season; and the profits of the last year (notwithstanding the extensive improvements at the works) will yield a large and *bona fide* dividend to the proprietary. The only drawback to an indefinite increase in the prosperity of the company, lies in the want of a large capital in hand—in order that the numerous depôts may be more regularly and efficiently supplied—and to enable the directors to give that credit to wholesale purchasers which is customary across the Channel. To effect this, the directors came to a resolution that the remaining [illegible] out of 15,000 shares be offered to the public at a discount of 5 per cent., and be entitled to whatever dividend the shareholders may declare on the old stock at the ensuing general meeting. This resolution will remain in force until the 24th December, 1842. By the 18th and 6th clauses of the Deed of Settlement, the directors are not authorised (unless sanctioned by three-fourths of the whole proprietary) to make any further calls than £1 10s. per share—which calls have been already made, and responded to with punctuality in every instance. In conclusion, the directors are happy to state that every liability connected with the purchase of the property, railways, machinery, &c., has been duly met, and that the company now stand free from debt or incumbrance of any kind.

Any further information will be readily given to those parties who are anxious to take shares, by the secretary, Mr. William Hassock, at the office of the company, 5, Robert-street, Adelphi, between the hours of Eleven and Three.

London, Nov. 21.

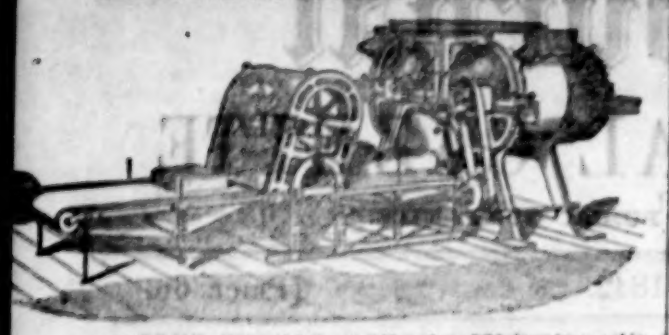
THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonials to its usefulness with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c., &c.:—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse, and I am quite willing that you should employ my name in favour of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Tuckingmill, Cornwall.

LAMP AND OIL PHENOMENA, AND NO PUFF.—CLARK and CO., OIL REFINERS BY CHEMICAL PROCESS, 251, STRAND, in compliance with the numerous applications for GOOD and CHEAP LAMPS, by the consumers of their famous oil, have determined to supply them and the public at large with all descriptions of lamps of the best style and workmanship, at reduced prices. Much has been said about various lamp phenomena, which, no doubt, are all very wonderful in their way; but Clark and Co. submit to the public, as an unequalled lamp phenomenon, the following list of prices:—Capital table lamps, from [illegible]; superior Cambridge reading lamps, [illegible]; hall lamps, from [illegible]; lamps of a most superb description, [illegible]. The above are only specimens of prices at which C. and Co. are selling their lamps. Their famous oil will burn quite equal to sperm, in every kind of lamp, without alteration; but if a light resembling the [illegible] be required, then their far-famed [illegible] lamp [illegible]. Four gallons of their oil go as far as five gallons of [illegible], so, in reality, their famous purified oil is even cheaper than common oils, at [illegible] per gallon. Lamps, lanterns, [illegible], &c. Various shades of every shape [illegible]. Cottons and other requisites. Oil, [illegible] imperial gallon; [illegible] 3s. Clark and Co., 251, Strand, three doors from Temple-bar.—N.B. [illegible], C. and Co. [illegible] on the lamps, and Clark and Co. on their [illegible] chimneys.—Terms, cash only.

AINSLIE'S PATENT BRICK AND TILE-MAKING MACHINE.



We have been favoured this week with a view of this ingenious machine, which, examined either for the beauty and regularity of its motion, the facility with which any number of bricks, or tiles, can be produced in a given time by making it go *faster or slower*, the solidity and soundness of texture generated by the material on its leaving the machine, or the extraordinary saving effected, both in time and money, proves itself superior to anything of the kind yet introduced; the cutting part of the apparatus appears to us a novel, but beautiful, mechanical arrangement, by which the length of the tiles are regulated, by increasing or decreasing its velocity, in proportion to the power with which the clay is propelled from the chamber, and, by a simple, but perfect, application of a cramp and regulating screw the power is adjusted to the greatest nicety, to overcome the friction occasioned by the tenacity of the clay, and the motion of the propelling rollers; the principle of this machine appears totally different to anything yet before the public, and we have give a statement from Mr. Ainslie's prospectus of the relative cost, in Scotland, of manufacturing drain tiles by hand, as on the old system, and by this machine:—

COMPARATIVE COST OF MANUFACTURING DRAIN TILES, &c.

By hand, making 3000 per day.		*By machine, making 10,000 per day.*	
One horse at pug mill	£0 5 0	Two men loading machine	£0 4 0
One man tending ditto	0 3 0	Three men carrying away tiles	0 4 6
Contract with labourers at 6s. 6d. per 1000	0 13 6	One man at engine	0 3 0
		Coals for engine at 3l. per 1000	0 2 6
		Interest on machinery, 10 p. ct.	0 1 6
Cost of tiles	£1 0 0	Cost of 10,000 ..	£0 14 6

Thus the cost per 1000, by hand, would be 6s. 10d., while that by the machine, including patentee's charge, is only 3s. 11d., and the quantity per day, by the old method, only 3000, while the machine could turn out 10,000 per day. Perhaps, the principal advantage is, the state in which the tiles, &c., leave this machine; being pressed through the moulds in an equal and regular manner, and formed therefrom in *the exact shape* in which they are to remain, without turn or twist, or *kilning* of any description; the work turned out, every part of each, and every individual brick and tile, is equally solid and substantial, for more durable, and requires less fuel to burn them than by the old method. We subjoin a wood-cut of the machine, which will give our mechanical readers an idea of its use; it stands on a surface of about eight feet by six feet.

PROCEEDINGS OF PUBLIC COMPANIES.

CITY OF DUBLIN STEAM PACKET COMPANY.

The adjourned meeting of the above company was held at the office, 15, Eden Quay, on Thursday, the 17th instant,

A. Ferrier, Esq., in the chair.

The SECRETARY read a report of the correspondence between members of the St. George Company and the Dublin Steam-Packet Company, in reference to the questions in dispute, which had not terminated amicably.—Mr. C. W. Williams observed, that in the correspondence which had taken place, there appeared a desire on the part of the St. George Company individually, to introduce matter which went to restrict the Dublin Company as to the way in which they were to carry on their business in future, and to take, as a basis for arbitration, the trading of 1842 rather than 1836, to which they could not assent. Mr. Williams read a letter from Mr. J. R. Pim, stating that he had resigned his agency of the St. George Company, and that he was then ready to take his seat among the direction of the Dublin Company, but that delicacy of feeling had hitherto prevented him. (The reading of this caused a great sensation in the meeting.) Mr. Williams observed, that this offer of Mr. Pim rendered it inoperative upon him to read a lithographed letter from that gentleman which bore directly on the subject. In that letter he endeavoured to fix upon the idea that he was the originator of steam trading with Dublin, while, on reference to the deeds, it was seen that one was dated in 1823, but that Mr. Pim did not join it until 1825. Mr. Williams then called on Mr. Pim to explain what he meant by the assertion that he (Mr. Williams) had received enormous profits by the company. He strongly denied such assertion, and distinctly charged the directors of the St. George Company, of whom Mr. Pim was one, with that mismanagement of the company, connected with the *Lord Blayney* steamer on the Newry line, by which the Dublin Company had, in the course of fourteen years, been mulcted to the amount of 20,000*l.*, besides the pay to Mr. Pim individually. Had Mr. Pim done his duty, every shilling of that sum would have been saved. Before Mr. Pim had charged him with receiving enormous profits, he should have remembered the time when he was receiving but 600*l.* per annum, for devoting his whole time and attention to the interests of the company, while Mr. Pim received 600*l.* per annum for doing nothing, and refused to abate a shilling.—Mr. Pim read a letter from Mr. Williams, and proceeded to prove that he was not accountable for the opposition between the two companies.—A Proprietor asked to what capacity Mr. Pim received 600*l.* a year?—Mr. Mahony said as assistant manager; a requisition of forty-five proprietors, or six directors, could suspend him.—Mr. Hegarty said there were two important questions to discuss—first, whether they should incur another loss of 30*l.* a week? and secondly, whether they should continue Mr. Pim in the receipt of 600*l.* a year? or would they strike to the St. George Company?—Mr. Deane proposed a resolution to the effect, "That the directors, proceeding as they do the fullest confidence of the proprietors, be called upon to meet the opposition of the St. George Company, in the most vigorous manner consistent with principle and honour."—Mr. Vance seconded the motion, which was carried with acclamation.—Mr. Deane then moved, "That the thanks of the proprietors of Dublin, and the freight papers present, be presented to the directors, for the judicious manner in which their interests had been uniformly attended to by them," which was carried unanimously.—Mr. Dickson said that as the opposition would entail some outlay, it was quite necessary to curtail the expenses. He knew of no officer they could dispense with but Mr. Pim, and moved, "That the trustees be empowered to remove Mr. Pim, and pay him no more salary."—After some conversation, in which Mr. Mahony expressed a hope that Mr. Pim would prevent any further public display and resign, Mr. Wallace moved, as an amendment, that the meeting do adjourn.—The Chairman put the amendment, and declared it to be carried by a majority present.—The meeting was adjourned accordingly.

MIDDLESBOROUGH AND TEES STEAM TUG COMPANY.

At the second meeting of shareholders in this company, a scene of confusion existed nearly unheard on such occasions. It appears that great dissatisfaction has existed among a majority of the shareholders, as to the management adopted by the committee; and Mr. Lambert, solicitor, of York, attending as the representative of many of the York shareholders. On entering the room, it was found that a Mr. Jackson, bookseller, of Middlesborough, was solitary in possession of the chair. This caused some consternation, as it was stated to hold only two shares, but the business was allowed to proceed. The report stated, that up to the end of March last, the committee were placed in great embarrassment; acceptances were running, amounting to 1800*l.*, and 1400*l.* being in the bankers, without any means of meeting such heavy engagements; but having disposed of the *Samson*, they were enabled to get off the greater part of the debts. It recommended the writing off the losses which had been sustained against the share account, and allowing the 10per cent. interest on the shares still owing to the bankers. The total amount of the company for the year had been 4277*l.* 14*s.* 5*d.*, and the expenditure 3743*l.* 14*s.* 5*d.*, showing a loss of 534*l.*; while on the quarter ending August 31st, there had been a profit of 71*l.* 1*s.*—Mr. Lambert went at great length to state the history of the company and its present prospects; he deprecated the extreme infringement of the general committee, which, if persevered in, would ultimately leave the loss of the entire capital of the company. The York proprietors had, however, now roused themselves, and were determined to resist the payment of the last call of 3*l.* per share, until a proper investigation had taken place. He proceeded in a powerful description of their conduct, in allowing money to be avoided on orders for shares without your being acquainted for; the dishonesty of Mr. Brunt, the secretary, and concluded by moving, "That the statement of the affairs of this company, which has just been received, in such as to convince them, that throughout the past management of the concerns of the company, there has been the most culpable inattention to the interests of the proprietors."—Mr. Fawcett, solicitor of York, took the part of the committee, and endeavoured to show that they had acted all through in perfect good faith, though they had been unfortunate in some of the results of their management. He proposed an amendment, for the purpose of setting aside Mr. Lambert's motion, which, however, was carried by a majority of 411 to 337; on which Mr. Fawcett's party would not allow the votes of the York shareholders, the Chairman deciding the votes were bad.—Mr. Leeman then proposed, "That Dr. Rawdon take the chair," which was seconded by Mr. Hodgson, and a majority was the result; and here a scene of indescribable confusion ensued, which lasted some time.—Mr. Lambert and Mr. Fawcett withdrew, and Dr. Rawdon and Mr. Fallowes followed. On their return, it was stated by Mr. Fawcett that an amicable arrangement had been come to.—Mr. Leeman then proposed the following resolution:—"That the committee to be now appointed for the future management of this company be, and they are hereby directed, to take measures for the sale of the several steam-vessels belonging to the company, at such as conveniently may be; and that, in the meantime, the committee let the vessels for the best price, and on the most advantageous terms, that can be obtained for the same—taking security for the payment of the rents monthly, for the due preservation of the vessels, and for the delivery up of such vessels by the occupier to the committee, upon receiving one month's notice in case of the sale thereof."—Mr. Fawcett having seconded the resolution, it was carried unanimously.—A new committee was appointed, as well as trustees, auditors, &c. The new committee met immediately after the meeting, and lost no time in acting upon the directions they received.

BRITISH SHIPPING COMPANY.

On Tuesday an adjourned special meeting of the proprietors of this company was held at the George and Vulture Tavern; the chair was taken by Mr. Perkins, when a long discussion ensued amongst the proprietors as to the affairs of the company—the expense and badness of the management, and the necessity of a dissolution, being the principal topics. The directors having replied to the charges brought against them, and the propriety of dissolving the company having been submitted, a recount of the votes was taken by the secretary, when the Chairman informed the meeting that the number of the shares present being so much under the number limited in the Deed of Settlement, the object of the resolution could not be carried out by the directors. The meeting, consequently, adjourned.—[The absence of so many proprietors, and this being the second meeting for discussing the propriety of a dissolution, would seem as if the badness of management was not generally entertained by the company, but that the depression of the affairs must be greatly attributing to the distressed state of trade and commerce generally, in which the company had only participated.]

MANCHESTER AND SHEFFIELD RAILWAY COMPANY.

A special meeting of the shareholders of this company was held at Cutler's Hall, Sheffield, on Wednesday, the 16th inst., M. Ellison, Esq., in the chair.—The Chairman having explained the objects of the meeting, which was, to give the directors special power to borrow 50,000*l.* of the Exchequer Bill Commissioners, and stating that such subject alone could be discussed, Mr. Sutherdon, the solicitor to the company, read the resolutions of the directors, which were, to borrow 50,000*l.* now, and 50,000*l.* hereafter; and that the directors for the time being have authority to borrow not exceeding 100,000*l.*, as they might think advisable.—Mr. Parker observed that the object was to borrow money, but he did not agree with the Chairman that no other question could be opened. He, as a lawyer, considered the general business of the company might be discussed, and it was also the opinion of an eminent equity counsel, with whom he was acquainted.—The Chairman said he also had had counsel's opinion, which coincided with his own; and after some conversation between Mr. Parker, Mr. Stephenson, and the Chairman, the resolution was carried, the only dissentient being Mr. Parker.

MIDLAND COUNTIES RAILWAY COMPANY.

A special general meeting of the shareholders in this company was held, pursuant to a requisition of shareholders, at the Athenæum, Derby, on Friday, the 18th instant, Thomas Dicey, Esq., in the chair. The requisition was addressed to the directors by Mr. James Heyworth, of Manchester, who stated, in a very lengthy address, that the meeting was deemed necessary, for the purpose of considering the best means to be adopted in making an effort to raise the value of their depreciated and still sinking property. A reduction in the salaries of directors and officers of the company, a system of the utmost retrenchment and rigid economy, and a lopping off of all useless appointments must take place, before the shareholders could hope for any proper return for the capital expended. Even a slight rise in the fares might be resorted to with success, without a fear of diminishing the returns; and to effect these important alterations in the best manner, he recommended a committee of inquiry, which was strongly opposed. A ballot was demanded, and the numbers were—For a committee of inquiry, 4024; against, 3309; majority for a committee, 715. It was then moved by Mr. James Heyworth, and seconded by Mr. O. Heyworth, "That a committee of shareholders, not being directors, be now appointed, to make full inquiry and examination with reference to the past, present, and probable future expenditure of the company, and to the general management of the company's affairs, and report thereon. The committee to consist of Messrs. James Heyworth, John Waddington, Joseph Gibb, John Ormerod, W. C. Borrer, W. Morley, and G. B. Piggot."—"That the directors, officers, and servants of the company, do afford such committee all the assistance in their power, by the production of books, papers, &c., and by explanation, &c."—And, "That so soon as the committee have agreed upon their report, the directors do call another special general meeting of the shareholders with reference thereto." These resolutions were severally carried, a vote of thanks passed to the chairman, and the meeting broke up after having occupied seven hours.

MINING CORRESPONDENCE.

ENGLISH MINES.

From a Correspondent.—The steam-engine at Linkerd, Consols Mine, was put in work on Tuesday, and great expectations are entertained of its working; things are looking well at St. Cleer, and it is confidently reported that, at Redmoor, operations will be resumed in about two months.—[We should feel obliged to correspondents for forwarding information respecting mining operations in Cornwall or other counties, which will receive ready insertion.]

HOLMBUSH MINING COMPANY.

Nov. 21.—Hitchins's shaft is sunk below the ninety fathom level 5 fms. 3 ft. 6 in., and is still progressing in favourable ground. In the 110 fathom level west the lode is ten inches wide, and worth 6*l.* per fathom; the lode in the winze, sinking below this level, is six inches wide, with a small proportion of ore. In the 100 fathom level west, the lode is fourteen inches wide, and worth 13*l.* per fathom; at this level east the lode is small and unproductive; the cross-cut at this level, towards the Flap-jack lode, continues in barren ground; the lode in the eastern stopes, in the back of the 100 fathom level, is still two feet wide, and worth 6*l.* per fathom; in western stopes, in ditto, the lode is twenty inches wide, worth 15*l.* per fathom. In the ninety fathom level west, we are still cross-cutting towards the lode; the lode in the eastern stopes, in the back of this level, is eighteen inches wide, and worth 12*l.* per fathom; the lode in the middle stopes, in back of this level, is sixteen inches wide, and worth 25*l.* per fathom; and the lode in the western stopes, in back of ditto, is eighteen inches wide, worth 20*l.* per fathom. In the eighty fathom level, west of Hitchins's shaft, we are driving south to cut the lode west of the large cross-course; in this level east the lode is eighteen inches wide, producing good stones of ore; in the cross-cut at this level, towards the north lode, the ground continues favourable for driving; the lode in the stopes, in the back of ditto, is fifteen inches wide, worth 25*l.* per fathom. The sixty-two fathom level east is without alteration. In the twenty fathom level east the lode is ten inches wide, composed of mundic and spar. The tribute pitches are much the same as for some weeks past.

Francis Phillips.

TREGOLLAN MINING COMPANY.

Nov. 21.—I am glad to state that the lode, in sinking the engine-shaft, still continues to be worth 40*l.* per fathom in depth, to the length of the shaft. we have three feet more to sink to reach the sixty-two fathom level, which we hope to accomplish in the course of a few days. The fifty fathom level is still passing through moderate ground; this level is extended about forty fathoms to the east of Baker's shaft. In consequence of there being an increase of stuff ground to sustain during the past week, we have been unable to continue the forty fathom level east. The tribute pitches continue without much variation.

James Nicholls.

CRIPPLE HALLS MINING COMPANY.

Nov. 21.—Seventy Fathom Level, Eastern End—Lode three feet wide, coarse in quality; western end, lode three and a half feet wide, ten inches of the north part very. Sixty Fathom Level—Nothing done for the past week in the eastern end of this level—the men have been engaged sinking down the eastern shaft; in the western end the lode is four feet wide, two feet of which is producing ore of fair quality. Fifty Fathom Level—The lode in two and a half feet wide, eighteen inches producing good ore. James's Shaft—Lode three feet wide, intersected with some good branches of ore. Forty Fathom Level—Lode about four feet wide, producing some good stones of ore.

Nicholas Langdon.

CONSOLS MINING COMPANY.

Nov. 21.—The lode in the seventy fathom level is two feet wide, with occasional stones of lead. The sixty is favourable for driving; lode one and a half feet wide, saving work; the north lode, to this level, has very favourable appearances. In the winze, sinking below the 52*l.*, we have a good lode, worth about 10*l.*

J. Wilkes.

TRELEIGH CONSOLS MINING COMPANY.

Nov. 19.—The eighty, east of Christoe, is three feet wide, with stones of ore; this level west is driving to cut the lode. The seventy west is three feet wide, with some very good stones of ore. The sixty west is one foot wide, very kindly. The fifty west is three feet wide, with good stones of ore. The forty west is worth 6*l.* per fathom. At Good Fortune the fifty four east and west are each worth 8*l.* per fathom. The forty-four west is also worth 8*l.* per fathom; this level east is worth 6*l.* per fathom. The thirty-four fathom level is worth 5*l.* per fathom.

William Symons.

WEST WHEAL JEWEL MINING ASSOCIATION.

Nov. 21.—The ground in the eighty-five cross-cut, south from Buckingham's, is still hard for driving. The seventy east, on the south branch, is worth 3*l.* per fathom. The seventy east, on Wheal Jewel lode, is worth 18*l.* per fathom, and the ground is more favourable for driving; this level west has not been taken down. The fifty-seven east, on Wheal Jewel lode, is worth 6*l.* per fathom; this level west is fifteen inches wide, spar, mundic, and black ore; the winze under this level is worth 10*l.* per fathom.

Stephen Lean.

TRETOIL MINING COMPANY.

Nov. 21.—The lode in the forty fathom level, east of Williams's shaft, is two feet wide, very good tribute ground. The lode in the forty fathom level, east of Heawood's shaft, is fifteen inches wide, very good tribute ground. We have not made much progress in driving west at this level, in the past week, the men having been engaged cutting a plat, to prepare for sinking to the fifty fathom level, which we hope to be able to finish in a few days, and begin to sink. We have just cut the lode at the thirty fathom level, east of Heawood's shaft, to the east of the cross-course, but cannot at present report its size or quality, it being still disordered by the cross course. The north part of the Slide Park lode, at the adit level, west of John's shaft is small and unproductive. The tin lode in the back of adit level, east of Morcom's shaft, is much as last reported.

John Morcom.

FOREIGN MINES.

BOLANOS MINING COMPANY.

[The following statements have been forwarded by a correspondent, whose letter will be found in another column:—]

Advices received by the company from Mr. Fiorezi, dated Zacatecas, August 27.

I am sorry they have been unable, in San Clemente, to pay costs in August, but I am still in hope that the result of the quarter (ending 30th September) will come out according to my estimate (*$*26,630 the company's share). Observing the large extent of unwrought ground in San Clemente vein, east of the Tiro General, below La Luz level, I have ordered examinations. The vein is one and a quarter vara wide, with a small proportion of argouses, of good quality; it has a promising appearance. Last month I noticed that the level Dios nos Guie, east, had been communicated to the workings of El Carmen old mine, in which, during the last two weeks, we have been sinking a winze 120 varas east of San German shaft; the vein in this place is divided into two branches—the largest about one-third of a vara wide; three varas sinking in it produced twenty-one cargas of ore, containing upwards of twenty marcs per montou. Our sinking was interrupted by water, but was resumed on the 15th instant, the water having disappeared. At Rondeneva, in Malinmoche, the drainage proceeds regularly, and at Santa Barbara new leaves seven or eight varas only to the bottom of the shaft. San Rafael—The appearances of this mine is still very favourable. Vota Bella—The vein in the adit, driving east, continues three-quarters of a vara wide, with a small quantity of useful ore. The ores raised in August, from San Clemente, are 570 cargas; ditto raised from San Nicholas, 1779 cargas.—Total, 2349 cargas. The same quantity is expected in September. The profit from San Nicholas, in August, is *$*19,532; the loss (or, rather, excess of costs over produce) in San Clemente is *$*4789—leaving a profit of *$*14,743. I expect to send from this district, by the October conducta, *$*25,000.—[This remittance may be expected to arrive by the Royal Mail steamer due 3d December.]

District of Bolanos, Sept. 10.—The six months' new agreement having expired, and no change decidedly favourable (in Barranco) having taken place—but, on the contrary, the five months showing a loss of *$*25,749—the first week in September the company will have retired from Barranco, and have no other right upon the mine except the machinery, nor any other expense but that of removing it. The loss for August will be about *$*1300, so that the apparent loss of the six months will be nearly *$*27,000; but, from our improvements in concentration and barrel amalgamation, the difference in the value of our stock of ores (this stock, at Bolanos, was, in July, 31,149 cargas) now, from what they were formerly estimated, will probably show an increase in value of *$*12,000 or *$*14,000—thus reducing the real loss in six months, in this district, to *$*12,000 to *$*13,000. The estimates and mine reports will be forwarded next week. I have just sent from this district 5000 marcs (equal to *$*41,200) of silver to Guadalaxara (to be coined), and, perhaps, shall be able to send an equal quantity by the beginning of November, so that a good part of the supplies made to these mines (from the company's Zacatecas district) since February last will be repaid.

Finance.—By the report of the directors, dated 15th June, 1842, it is shown that the debts of the company in June, 1841, were 45,600*l.*, which have been reduced, by the issue of 9141 new shares, 18,282*l.*, and remittances to England 24,316*l.* (in all, 42,600*l.*), leaving a balance of 3000*l.*; and taking the cost for the half year 1400*l.*, gives the liabilities to the end of 1842, 4400*l.* The remittances to England to the end of October, have been *$*62,000 (12,400*l.*), thus leaving a balance of cash in hand of 8000*l.*; and a further remittance of *$*20,000 is shortly expected, having been advised as forwarded from Mexico by the October conducta.

Lastly, the mining engagements of the company at the district of Bolanos (the mine Barranco being relinquished) are limited to the northern mines—one of which, San Cayetano, is represented as promising, that further trials are authorised by the directors, to a limited expenditure. But the principal operations of the company will now be at Zacatecas, where they possess mining rights on two important lodes, diverging from Malinmoche (also belonging to the company), the one lode with a slight northerly, the other with a slight southerly inclination. On these lodes are several mines, including San Clemente, San Nicholas, San Raphael, &c., &c., and the entire range is of great extent. Mr. Stein, a miner of acknowledged talent and experience, who retired this year from the company's service (to the great regret of the body of shareholders) on the arrival out of Mr. Fiorezi, concludes a letter to the directors, by giving his view of the prospects of the mines in Zacatecas; in which he observes, "the prospects of the company are now very hopeful," and concludes his remarks upon San Clemente, San Nicholas, and Malinmoche, with these words, "Zacatecas, on the whole, is a district worthy of peculiar attention."—The Bolanos Company now consist of 13,260 shares, the average cost of which is under 30*l.* per share; or, if the dividends (72,000*l.*) received are deducted, the average cost is under 25*l.* per share, including, in the average, the original 2000 shares of 150*l.*

REAL DEL MONTE MINING COMPANY.

Mineral del Monte, Sept 27.—The San Patricio level, east of Acosta shaft, in which the new discovery of ores was made, as described in my letter to you of the 5th instant has been, communicated to the same level, driven west of Santo Domingo winze. The ores are found to be about ten varas in length, which, although of a good quality, are not so rich as those of the shaft, and what we have sometimes found in other parts of this mine. We have already commenced sinking a winze at the point where the level was communicated, in which there is a branch of good ore from twelve to eighteen inches wide, while the remainder of the vein for a vara more, produces good argous ore, it appearing from the assays already made, that the first is worth about 12 marcs, and the latter about 20 marcs per montou. Another but small stream of water was met with a few days since in the San Antonio cross-cut, driving north from San Pedro shaft; notwithstanding which, owing to the very heavy rains, the water has lately risen a little at Acosta, and the neighbouring mines. This cross-cut, which is about twenty-five varas below the present level of the water in the veins, has been completed 174 varas out of the thirty-five varas, the computed distance from San Pedro shaft to the lode. The driving proceeds at the rate of about a vara weekly, it will, therefore, be about four months in reaching the vein, although the water may, probably, be let down sooner by the crevices and branches we may meet with. At Rincon, the bottom workings have been covered with water during the last fortnight, owing to the breaking of the main pin of the principal underground balance-bob of Terrero engine, which caused the destruction of the bob, so that we were obliged to make and fit a new one, which occupied about two and a half days, during which the water rose seventy varas, which, however, we all drawn out two days since. The heavy load on this engine, and the necessary rapid rate of working, exposes us to these frequent accidents, from which, however, we may hope to be relieved, when the drawers now engaged shall be set to work, to which we intend removing a part of the workmen under, which now burthens the engine at Terrero. No variation, worthy of notice, has occurred since our last letters in any other part of the concern. The silver produce of September month, which has been sent to Pachuca to-day, is only forty-seven bars, the falling off being occasioned partly by the hindrance in clearing out and repairing the smelting furnaces, but chiefly by the continued heavy rains, which have retarded the operations in the pits, and prevented the washing of a forth a bench of the hacienda, which would, otherwise, have come in.

August (four weeks) expenditure	£16,314 7½
Silver produce (sixty-three bars)	70,530 0
Profit	£54,215 4½

ST. JOHN DEL REY MINING COMPANY.

Minas Velhas, Sept. 6.—Produce for August, 7400 oitavas, or 71 lbs. 7 oz. 1 dwt. 12 grs. Troy; 1025 tons 3 cwt. of stone gave 4·90 per ton, 25·00 per cent. of sand, to amalgam, 1·720. Average number of hands working through-

days, 55·48. Arrastre—Three tons of sand, accumulated from the upper stamps, which had undergone no process, save that of streaking, were concentrated, and fourteen cubic feet resulting from the concentrating ground by the arrastre, the result gave 1½ ozs., or ⅛ ozs. to the ton. Mine Report—The mines are extending east and west at Champion and Louisa; the workings on the latter lode to hill are of much interest, there is no alteration to report in the lodes except that in the eastern end of the Bahu shaft, more ore is seen, which cannot be availed of, the inclined drawing shaft being as flat as it can be laid down, to allow the kibbles to travel. House dam is as firm as the country: thirty-four feet of water in the reservoir. You may, with all confidence, rely upon its strength and future efficiency, and that the downpouring of tropical rains are amply guarded against. Health of Blacks—As usual, at this season, the sick list is swollen by cases of pleurisy and fever—twenty-six in hospital.

Sept. 18 and 28.—Average number of heads working eighteen days, 53.07 In the beginning of the month the water decreased in the rego, and the Herring carried only nine heads. We have had a few showers of rain, and have a small supply of water in the bananal. Powder—We received Tropeiro's receipt for saltpetre sent from Rio, and hope to pick up sufficient in the neighbourhood to supply the mines till it arrives. Dam—A large force employed upon it daily to complete it before the rains set in, which will be effected, unless the rainy season sets in earlier than usual.

UNITED MEXICAN MINING ASSOCIATION.

Guanaxuato, Sept. 9 and 26.—I beg leave to refer to the inclosed duplicate of my letter to the court, dated the 26th ult.

Mine of Rayas.—There is positively nothing of interest to communicate to the directors, on the present occasion, respecting the actual produce or the workings of this mine, the former having continued much the same, and the latter without any improvement, since the date of my last dispatch. The returns made up to the 10th instant are as follows—viz.:

	Mine sales.	⅛ Buenoneo sales.	Total.	Amt. memoria.	Net surplus.
Aug. 29 ..	$3894 2 0	$2546 7 4	$6429 1 4..	$2895 5 5....	$3383 3 7
„ 27 ..	3906 7 4	2024 3 6	5931 3 6....	4800 3 6....	1130 7 2
Sept. 3 ..	2851 6 0	2137 1 0	5020 7 0..	3427 5 7..	1593 1 1
„ 10 .	2619 6 0	1874 4 4	4494 2 4	2931 3 3....	1562 7 1

Making together $6620 3 3

and of which the association has received the sum of $4846 7 7, corresponding to the 13½ bars mortgaged for the payment of the mine debt, thereby reducing the latter to $932,128 4.

Rayas New Contract.—This subject, as mentioned in former letters, continues in abeyance.

Quicksilver.—I beg to reiterate the suggestion made to the court in my last letter, in respect to the resumption of the former monthly supply of sixty bottles of this article, and, at the same time, to request their immediate attention thereto, as notwithstanding the 200 bottles already sent, the periodical supply so requested, will, in all probability, be required for use here, quite as soon as it can be purchased and forwarded by the directors; considering the time usually spent between the landing at Tampico, and the delivery here, usually about six weeks, and, in some instances, as much as two months.

Remittances.—The next Tampico conducta will, it is expected, leave a month earlier than the time originally named—say about the 1st of November, and by it a remittance will be made to the directors, which, judging from my actual ways and means, will range from $30,000 to $40,000.

BRAZILIAN COMPANY.

The following letters relate to the Conceiçao Mine:—

Conceiçao, Sept. 3.—Mr. Harding's report of the 25th ult. must, I think, have extinguished all hopes which remained with you as to your affairs here ending prosperously; but, if not, that which I deeply regret being under the necessity of now having to make, will unquestionably do so. On the 25th you have been told, that, from the water increasing so rapidly to the second, or eastern box, the sinking the small box within it was discontinued, and another within the first, or western box, placed, in the hope that, by its means, when forced enough down, the water in the first would be relieved. After every effort had been made to accomplish this object, it was found wholly impossible to get it beyond two feet down. An iron pipe was then tried, but, with every exertion which could be made, it could only be got down seven and a half feet—still five and a half feet short of the bottom of second box—precluding, consequently, all hope, that, in that way, the water in second box could be relieved. Having, therefore, well weighed our position, and having had Mr. Harding's and Captain Bryant's views upon the same, I have directed Mr. Harding (being myself obliged to return to Cata Branca) to make the three following attempts:—First, to again try and clear up the second box, and the bottom of which, south edge, I feel satisfied must have cut, or be on the line. If that fails, to endeavour, by keeping the water in the second box as close down as possible, and which might reasonably be presumed would drain the Fundao, to reach its (the Fundao's) bottom, or, on failure of both these, to make a run in sixth or tenth ends, or both, in the hope of, in that way, getting enough down in the box, or in the Fundao, to see the line where last worked by the former proprietors. This will occupy the ensuing week, when, if all proves unsuccessful, I have directed Mr. Harding, in accordance with your instructions for my guidance under such circumstances, to immediately close the affair. I must here observe, that the line under the old level has been proved in divers places, and the whole between the second and next Fundao taken out, but, with the exception of one, none of the many samples showed anything. As I shall have so shortly to address you fully upon all points relating to this speculation, I forbear now trespassing further upon your time, than to assure you that every attention shall be paid both to your instructions and to the interests of the company.

Cata Branca, Sept. 9.—My last letter from Conceiçao informed you of the slender chance of success which remained for us there. Yesterday a few lines from Mr. Harding reported that all was over. They had got down upon the Fundao's to within three feet of its bottom, when both sides and back began to give way, and the liquid jaccinga flowed in faster than it could be removed, and before the men were out of it ten minutes was as high as ever. The run in the ends below was then tried, but without the slightest effect. Under these circumstances, Mr. Harding, in compliance with my directions, stopped proceedings, and applied all hands to collect such of the materials as it will suit this establishment (Cata Branca) to purchase; the men will also come here. Every exertion shall be made to close all connected with this unfortunate speculation (it will not take long), and, when completed, I will address you fully upon every point. I need not tell you how deeply I regret having to make this communication. W. COTZSWORTH.

MINING NOTICES.

BRANCEPETH COLLIERY.—On Tuesday last, the owners of this colliery had the satisfaction of enjoying their first parcel of coals from the interior to the place of shipment. On that day a train of coal waggons, accompanied by a coach train, bearing the owners and their friends, proceeded from the colliery to Stockton by the Clarence Railway. The procession displayed several flags, one of which, provided by the workmen, bore the inscription, "Brancepeth Colliery—Quality, Strength, and Durability," and the procession was loudly cheered by the workmen on different parts of the line. On the following day, about 100 chaldrons were dispatched to Port Clarence for shipment. The quality of these coals is universally admitted to be the best that have been brought to-day in the Western coal-field in this county. The colliery has been "won" in an unprecedentedly short period. The ground was only broken on the 28th of October, 1841; and, including the sinking to a depth of fifty fathoms, forming and laying a railway about two miles in length, and erecting a bridge across the valley of the Wear, the whole has been completed and the coals sent to the port of exportation—a distance of twenty-four miles—in the short period of one year and eighteen days.—*Durham Adv.*

MINE ACCIDENTS.

Pennydarran.—James Price was killed, on the 14th instant, in a level at Pennydarran, by some rubbish falling on him.

Clay Cross.—Last week one of the engine-boilers exploded at the black shale pit of Messrs. G. Stephenson and Co., Clay Cross. The engines were going at the time, drawing coals, and a number of workmen were variously employed all about it, but providentially no one received the least personal injury, although large stones, bricks, and other materials, were blown up to a great height in all directions, and, in their descent, fell on thick upon the engine-house, that the roof was like a sieve, with their falling through it. The boiler was seen to rise up in the air higher than the engine-house, and fell a few yards distant, with its bottom uppermost.

Wingate Grange Colliery.—Ja Jackson Dickenson and two other men were at work in Wingate Grange Colliery, on the 6th inst., and, for the purpose of working a nearer road to the south, they had improperly taken down a "brattice stopper," which had been erected to drive the current of air in the direction that would best ventilate the mine, when a quantity of inflammable air exploded, whereby Dickenson was killed.

Great Lumley.—C. Morgan, whilst in the act of propping the roof of Coxhoe pit, was severely crushed by a stone falling upon him, from the effects of which he shortly expired.

Wonderful Presence of Mind.—Last week, at Torquay, a man named T. Reynolds was engaged in cutting a well in the solid rock. He had prepared for blasting, and having attached a fuse, was being drawn up, when the rope broke, and he was precipitated to the bottom, a depth from where he then was of twenty-five feet. So great was the concussion that one leg was broken in three places, his skull fractured, and his whole frame dreadfully bruised; he had, however, sufficient consciousness and presence of mind to snatch the lighted fuse from the charge (although in doing so his sufferings were further augmented by burning his hand), and thus providentially escaped a catastrophe in which death would have been inevitable.

PROF. VIGNOLES'S LECTURES ON CIVIL ENGINEERING, WITH PRACTICAL ILLUSTRATIONS.

LECTURE 16 (SECOND COURSE).—The result of the examination into the expense of passenger traffic had been investigated in the last two lectures, and a general average cost had been deduced, varying from two-thirds of a penny to one penny per mile per passenger, including the Government duty, the fraction varying, of course, with the number of passengers in the train. It would not be necessary to go so minutely into the items of corresponding expense of merchandise and mineral traffic, nor would this last lecture but one of the course allow sufficient time to do so. Mr. Vignoles said he should endeavour to compress what he had to explain further about railway expenses into this evening's address, and, in the concluding lecture, he would take a general review of the whole of his course on railway matters. The cost of carrying coals, at very moderate velocities, on the great colliery railways, is about one penny per ton per mile, which may be divided into the following heads—viz.:

EXPENSE OF TRANSPORT OF COAL.

	Decimals of a penny.
Locomotive power	·38
Waggons	·19
Conducting traffic	·23
Maintenance of railway	·26
General expenses, including local taxes	·14
Per ton of coal per mile ..	1·20

The proportion of the weight of the coal to the gross load carried being as 3 to 5. The expense of carrying goods on the Liverpool and Manchester Railway, taken on the average of seven years' traffic, appears to be about 2¼d. per ton per mile, divided as follows—viz.:

EXPENSE OF TRANSPORT OF MERCHANDISE.

	Decimals of a penny.
Locomotive power	·57
Waggons	·22
Conducting traffic	1·06
Maintenance of railway	·31
General expenses, including local taxes	·58
Per ton of goods per mile ..	2·54

But in this sum is included a considerable item, which does not properly belong to the railway itself—viz., the cost of collecting and delivering the goods all over the towns at the two termini, by carts and waggons, and full 1d. per ton may be taken off for this item—making the total expense 2d. per ton per mile—the proportion of useful weight, of weight of merchandise carried, to the gross weight, including the waggons, being as 1 to 2. We have now the results of many years' working expenses of railways for passengers, as we have investigated in the last two lectures, and, as above, for coal and merchandise, which may be tabulated thus:—

EXPENSES OF RAILWAY TRANSPORT PER MILE.

Passengers (at high velocities)	1d. each.
Coal (at very moderate speed)	1d. per ton.
Merchandise (at fifteen miles an hour)	2d. „

Reducing the expenses of passenger traffic to a tonnage—taking the weight of twelve passengers and their luggage as being, on the average, equivalent to a ton—we obtain 1s. per ton per mile, which is twelve times the expense of carrying coal, and six times that of conveying goods. A portion of this difference, but not all, is due to the velocity, for, though it would seem that this doubles the cost of goods, as compared with coals, it is not so in fact, as a large proportion of expense is incurred in the handling and office work necessary for merchandise traffic, to which coals is not liable. Comparing the proportion, between the useful or paying load, and the gross weight moved, including the vehicles, we have, coal 3 to 5, merchandise 1 to 2, and, as explained in the preceding lectures, passengers 1 to 6, and often more. The consideration of the comparative view in this light led Mr. Vignoles to observe, that, notwithstanding the apparent difference, there is a great analogy between the proportion, as regards goods and passengers, for, if the passenger trains could be fully loaded, the proportion between the profitable and the gross load would be nearly the same, both for passengers and merchandise, the result being almost similar, as regards the actual weight to be transported and the preparation to be made for moving the mass—at the same time, it was an additional and collateral proof that the figures laid down in the above general terms by the Professor might be depended upon. On colliery and mineral railways the traffic is arranged so as to carry the *maximum* profitable load on a *minimum* weight of vehicle; supposing coal and merchandise were really conveyed on equal terms in everything except speed, the difference in velocity would appear to effect a saving of one-half. This, however, is not the case; the difference of expense due to velocity, may, perhaps, be stated at from ·30 to ·60 of a penny per ton per mile as a *maximum*; the remainder of the difference is chargeable to the mode of conducting the traffic; and, in reference to the passenger trains, it should be borne in mind, that it is the necessity of merging the fluctuation of passenger traffic, and, in order that the public may be accommodated, that, taking weight for weight, it costs railway companies six times as much to convey passengers as to transport goods. On the other hand, ten years' experience of the working of the Liverpool and Manchester Railway produces the result that their profit upon the conveyance of a single passenger averages the same as the profit on the carriage of a ton of merchandise. But why?—On that line, there being a great competition with the river and canal navigation, the rate of charges for goods has been brought down to the lowest terms, for the utmost possible extent of accommodation of warehousing, delivery, &c.; but there being a practical monopoly in the conveyance of passengers, the fares are not quite to a *maximum*, but still very high. Mr. Vignoles observed, in applying these facts, that it had been one of the objects of these lectures to show, and he wished to enforce it on the minds of the class, as a useful and easily-attainable result, that by sending trains more frequently, with fewer carriages, and by constructing those carriages to a better proportion between the paying and the unprofitable load, the increased accommodation would bring increased traffic; for, considering that the expense of transport is but little affected by the number of passengers, by such increase the expenses, as computed per passenger per mile, might be fairly calculated as susceptible of being reduced from 1d. to ½d.; supposing every other condition to be as at present: another advantageous consequence would be that of keeping the engines above their work. Such an arrangement of trains bore greatly upon the important question of what amount of extra expenditure on railways could be fully justified by prospectively consequent beneficial results; but the Professor said he would not again enter into the question of gradients. The necessity of perfect gradients assumed enormous loads as generally occurring, whereas exactly the opposite was the case in practice, especially with passenger trains, and on lines in districts not adjacent to the metropolis or our largest commercial and manufacturing towns—indeed, it is remarkable how nearly alike in all railways whose gradients differed greatly, were the working expenses per train per mile. On the North Union Railway, for example, where five miles out of twenty-two are at an inclination of fifty-three feet per mile, the average expenses of working trains is quite as small as upon railways of which the gradients are nearly horizontal; and it was found that up to six or eight carriages, or from that number even up to ten vehicles per train, no very material mileage difference of working expenses results on lines with what are called comparatively favourable or unfavourable gradients. Mr. Vignoles then referred to a former lecture, wherein he had considered how far beyond 10,000*l.* per mile, as the total cost of any given line of railway, it was justifiable to incur increased expense in the formation, to obtain more perfect gradients, or to make the railway at all. He observed, that the late Irish Railway Commissioners had distinctly shown, by a different process of reasoning, and on different data, than any known since this sum could seldom be advisable in agricultural countries, or where the traffic was inconsiderable, and the Professor strongly insisted that it was more expedient to encounter inclinations of fifty, sixty, or even eighty feet per mile, with lighter trains or heavier engines, and at a somewhat greater cost of working per mile, than to incur the expense of vast excavations and embankments, and costly works of art, to obtain better gradients. He particularly referred to his own practice in this respect, and to his regret to the above commissioners on the laying out of the railways in Ireland, and observed that the French engineers had fallen into a great mistake in proposing such expensive sections for the French lines. On the Liverpool and Manchester Railway, and, indeed, on several other lines, the expense of locomotive power was only about one-fourth of the whole cost of transport; but, supposing it to be as much as one-third, it would be found that not a third part of this third, or not more than one-ninth part of the whole working expenses, were effected by the gradients, and nearly all other expenses, beyond increased fuel and repairs, on account of steep inclinations, were common to all lines, and depended upon management rather than the gradients. If the number of miles run by engines with trains, and the total annual cost of working various railways, were taken, and also the corresponding amount of gross receipts and net returns per train per mile, and a comparison made with the interest of the capital expended, it would be found that on very few lines, indeed, had the vast expense of obtaining good gradients been justified. Mr. Vignoles observed that, having determined the cost of conveying goods and passengers, as before explained, and having ascertained the probable amount of traffic, it would be found that the public could seldom afford to pay higher charges than such as, in addition to the cost to the company, would leave them a profit, per passenger per mile, of 1d.; per ton of goods per mile, of 1d.; per ton of coals per mile, of ½d. On the continent the people could not give half the above, and so in Scotland and in Ireland; any increase driving the traffic into other channels, as in the case of the Paisley and Greenock Railway, or, perhaps, stopping it altogether. On the great travelling line monopoly entirely kept up higher prices, but intercourse was thereby greatly impeded, and the public suffered, and the traffic returns published showed that the limits of receipts had been attained on many of them. On the Dublin and Kingstown Railway the average expense of conveying passengers was only ½d. per mile, and the profit to the company a trifle above that figure—say, about five-eighths of a penny per passenger per mile; this low fare produced a steady and regular increase of intercourse. The profit to the great English railway companies was about 3d. per passenger per mile, which was, perhaps, often not more than what was requisite to pay for the great, and, as the Professor argued, the useless, increased expense of these principal lines, but the travelling public paid dearly for it. Mr. Vignoles observed, in conclusion, that what he had stated were sure and simple data by which the working of the existing and future railways might be dissected, and a judgment formed on how far it was advisable to have spent 250,000*l.* per mile on the Greenwich and Blackwall Railways, and an average of 50,000*l.* per mile for many lines whose prospects could never have justified it, particularly if *à priori* investigations, such as those here gone into, had been instituted.

ON LIGHTNING CONDUCTORS FOR SHIPS.

BY LIEUT. SABBEN, R.N.

The vast destruction of life and property which has taken place within the past few weeks from the effects of storms at sea, renders any information which can be obtained, as to prevention of the consequences which may arise from the effects of lightning, of more than ordinary importance at the present moment, when the winter, setting in with all its terrors, renders us naturally anxious, not only for the lives of our fellow-creatures, but also the property committed to their care, in traversing the deep. It is with feelings of this nature, that we insert a brief abstract of the lecture of Lieut. Sabben, delivered by him at Portsmouth on the 10th instant, which we only regret want of space precludes us from inserting entire. The principle of conducting the electric fluid directly from the ship, over her side, into the sea, by means of the wire-rope manufactured under Smith's patent, is the course recommended strongly by Lieut. Sabben.

In the course of his lecture he referred to the system of W. S. Harris, Esq., F.R.S., whose mode is that of applying "a bewildering right-angled zigzag process, introducing that very destructive element into a ship by conductors made of strips of copper, inlaid the whole length of her masts, down to her very keelson, and thereby a still more confused and unintelligible process discharging the same through her framework." We have not space to follow Lieut. Sabben through the observations made by him, or the comparative evidence of the application of the wire rope over the mode pursued by Mr. Harris, in which he shows the superiority of the former, but we may extract one or two points from the report before us. In referring to the effects produced by a flash of lightning, Lieut. Sabben observes, that Mr. S. Harris had published accounts which fully confirmed the position entertained by him, from which it appeared, that "the disruptions in the vessels' framework so injured invariably took place near the surface of the sea, on which, on all sides, it was admitted, discharging atmospherical electricity," while, he contended, there was strong presumption for supposing that the premises of Mr. S. Harris were founded on incorrect data, as to the provisions made by him for averting the evil. Having adverted to the several points wherein he explains the "irrationality" of employing Harris's system, whereas, by "a more ready, direct, and scientific process," the object might be achieved, he observes, "that it inevitably followed that Mr. H.'s idea of conveying electric matter out of a ship, simultaneously by many bolts in her sides or bottom, was an untenable assumption; and which, before being made, required from him the proof that he could form, not only one, but many different electric circles, during one discharge of the Leyden battery." Lieutenant Sabben further adds, that "the success of Mr. H.'s first experiment with the *Greatee*, in Portsmouth Harbour, the second being a failure in one of its particulars, was by no means affirmative of the efficiency of his conductors, the use of which would have been entirely and most advantageously superseded, and rendered altogether useless, had there been a small wire, or wire rope conductor, hanging loosely from her mast-head over her larboard or inshore side into the sea," as under the patent of Mr. Andrew Smith. For reasons already adduced, we cannot follow Lieut. Sabben's report further. He evidently, throughout his lecture, delivered at Portsmouth, on the 10th inst., decries the lightning conductors of Mr. Harris, and is wedded to those of Mr. Smith, whose wire rope is well known to our readers. We offer no opinion on the superior advantages of the one or the other, but would be led to believe, from the application of Smith's lightning conductors by Government, as well as the wire ropes to vessels in the navy, that there are strong grounds for supposing that the opinions of Lieut. Sabben to be consonant with facts.

PATENT GUIDE SCREW STOCK.—Messrs. Whitworth, of Manchester, have introduced a new guide stock, which will cut a screw but little inferior to that obtained in a slide lathe; the thread produced is quite true, of the exact pitch required, and perfectly formed throughout, without distortion of the metal; the defects of the old stock are quite avoided. The plan is simple, but perfect; in the frame of the stock is a fixed die, forming, by a division, two parts of the cutting threads; at proper distances are two moveable dies, brought up or down by means of one screw-nut on the outside of the stock, and thus regulating the size of the tap; this invention will place a perfect screw-cutting machine in the hands of many who could not obtain screws from the lathe without much trouble, and yet whose peculiar work requires them of the nicest formations.

ATMOSPHERIC RAILWAY SYSTEM.—Mr. R. Thomas, of Falmouth, in a letter addressed to the Editor of the *Falmouth Packet*, calls the public attention to this proposed line of railway. He expresses his disapprobation of the observations in Mr. Vignoles's lecture, at the Polytechnic Institution, at Falmouth, asserting that the atmospheric system was the only means of securing railway communication to that town, saying that it may tend to distraction parties who are interested in such line. He states, that however sanguine Mr. Vignoles may be as to the success of the atmospheric system, he has strong doubts as to its practical efficiency, over long lines of road, arising from the many, and sometimes present, inclinations, curves of stoppages and delays, which may occur from such system.

HUGE WIRE-ROPE.—A friend of ours, who has just returned from Antwerp, informs us that he saw landing on the quays there, from a vessel arrived from Newcastle, a huge coil of wire-rope, which excited much astonishment. It was stated to be 5,500 yards in length, and to weigh twelve tons, and he understood that it had been purchased by the Belgian Government for the celebrated inclined plane of the railway from Antwerp to Liege.—*London Paper.*

RAILWAY COMPENSATION.—A compensation case between the Great North of England Railway Company and Mr. W. Walters, of Darlington, was tried at the King's Head Inn, before W. E. Wardell, Esq., the Deputy Sheriff. It was to assess the value of a piece of land of Mr. Walters', which was wanted for the railway. After a number of witnesses on both sides, during the course of two days, had been examined, some valuing it at 250*l.*, and others only at 60*l.*, the jury gave a verdict for 244*l.* 1*s.*

REDUCTION OF THE DUTY ON SULPHUR.—The following letter has been received by Messrs. J. and W. Kaye, Clarendon street, Dublin:—*Palermo, Nov. 3, 1842.*—Messrs. Morrison, Valentine, and Co., beg to announce the reduction of the duty on sulphur in Sicily, from about 17*s.* to 9*s.* per ton, to have effect from this day, and will by next post have the pleasure of writing more fully."

GAS.—It is announced that a very important improvement has been made in the manufacture of gas on St. Encarnagin, by which the required labour for the complete manufacture is reduced from six hours to half an hour, and the work of forty men to four, besides avoiding the great danger which, under the old system, the men were subject to.

NOTICES TO CORRESPONDENTS.

The MINING JOURNAL *is regularly published about Two o'clock on Saturday afternoons, at the office, 1, Crane-court, Fleet-street, where it can always be obtained, and there is no cause for irregularity in its supply, in town, other than neglect on the part of the agent through whom it is ordered; but, as respects its transmission to country subscribers, the blame is shared with the Post-office authorities.*

In consequence of the increase of business which has taken place in connection with the publication of the *Mining Journal*, more extensive premises than those at present occupied are found absolutely necessary; the establishment will, therefore, be removed to 26, Fleet-street, opposite St. Dunstan's Church, as soon as offices can be prepared suitable for the efficient discharge of the various duties which have of late so satisfactorily increased upon us.

"J. L." (Newcastle).—A notice of Mr. Atkinson's paper, on the Sinking and Tubbing, or Cuffering, of Pits, as practised in the Coal Districts of the North of England, appeared in the Journal of the 10th September last.

"A Subscriber" (Birmingham).—We cannot, at present, devote the space required for a full consideration of the subject.

SOUTHAMPTON DOCKS.—In the official communication from this company, inserted in last week's *Journal*, we omitted adding, after Mr. Saintsbury's signature, "secretary to the company." The blame of this omission, if any, rests with us, as, from the tenor of the letter, and that gentleman being so well known in connection with the company, we considered its insertion superfluous, and, consequently, erased it.

"A. N."—The paper is not suited to our columns, or we should willingly comply with the author's expectations.

From the great press of matter which we have received during the past week, it was our intention to have prepared a supplement to accompany our present Number, but have not been able to effect it in time; we must, therefore, beg the indulgence of those correspondents whose communications are not inserted, and which will, therefore, have to stand over until next week.

Received—"S. B. R.," with thanks—"J. H."—"D. L.," next week.

We are unable to attend to several letters, &c., received by this morning's post.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, NOVEMBER 26, 1842.

In directing attention to Mr. BUDD's patent for the manufacture of iron, by the application of cold-blast to anthracite, we were not prepared for results so satisfactory as those which will be found described in our present Number, both in the report of Mr. DAVID MUSHET and the advertisement of the Ystalyfera Company. The talent and ability of the gentleman who has made the experiments, leaves no doubt as to the superiority of the article produced, the only question being the cost of manufacture—a matter which must affect the rate at which the iron comes into the market, in competition with others, and which also must necessarily have its influence in the adoption of the patent throughout the anthracite district. On this point we are without any information, and, so far as regards the operations of the Ystalyfera Company alone, it is of no moment—but, as relates to the patent of Mr. BUDD, it becomes a matter of primary consideration.

Our columns of this week, in addition to the interesting report of Mr. MUSHET, contains also an advertisement from Mr. CRANE, of the Ynisedwyn Works, situate within half a dozen miles of those of the Ystalyfera Company. To this we would direct especial attention, as it affords evidence of the advancement made by that gentleman in smelting with anthracite, by the application of the hot-blast. Our readers, and those interested, have thus placed before them, in our present Number, the results of experiments made in the same locality, with materials of a similar nature, both by hot and cold-blast, and thus have the means of arriving at correct conclusions; while we have to express our hope, that the two parties interested in the subject, will enable us, in an early Number, to give the several proportions of ironstone, anthracite, and limestone, used in the respective processes.

We have further to direct attention to some valuable experiments made by Messrs. GRAHAM and Co., at the Milton Iron-Works, with hot and cold-blast iron, from which it appears that the strength of the former, in contradiction to the prevailing opinion, is greater than the latter. The importance, however, which we more particularly attach to this series of experiments, is the refutation given to the statement of Mr. HARTOP, as to the properties of the iron, from which it would be naturally concluded, in the absence of information of the nature conveyed in our columns of to-day, that it was perfectly unfit for any description of machinery where strength was required. We doubt not that some explanation will be afforded as to the results arrived at by one and the other, for we are bound to believe, that the experiments in each case were made honestly—yet how different are the representations put before us.

We hope, in an early Number, to give the result of further experiments now in the course of being made at other works. The value of information of this nature must be duly appreciated, and we are well pleased in being selected as the medium through which it is conveyed.

For reasons which must be obvious to our readers, and which will, we hope, not only be understood by the Court of Aldermen, but duly appreciated by one of its members, we have abstained from taking any part in the investigation entered upon by the committee formed for inquiring into the truth of the charges preferred against Mr. Ald. THOMAS WOOD, with reference to that gentleman's connection with the Talacre Coal and Iron Company. Having determined on abstaining from any further observations, as soon as the object we had in view was such end—that of an inquiry being instituted—we should not now put pen to the subject, but that the proceedings in the Court of Aldermen on Saturday last call for some passing observations. The proceedings appear in another column, which render it only necessary to be brief in directing attention to one or two points, and, in doing which, we hope that even the worthy aldermen will acquit us of any desire to "persecute" him, or to ask more than that which is due to the community at large, for not only is the city of London committed by his acts—if he be guilty—but he has inflicted a most serious and irrecallable injury on many families, the principals of which have been reduced, not only to beggary, in some instances, but, in others, compelled to leave their country. We have an instance before us—Mr. SHAW, of Celbridge, near Dublin; this gentleman, who embarked upwards of 10,000*l.* in the concern, has been sued for two bills, between 9000*l.* and 10,000*l.*, and, we believe, a fiat of bankruptcy issued, these bills being part of the *purchase money*—a purchase, it will be remembered, made *of and by* Mr. Ald. T. WOOD, *cum multis aliis*.

At present we are not in possession of further information (except private communications, which shall be made public when occasion requires) than that embodied in the report of the proceedings before the committee on the 18th instant, to which we now have to invite attention. Mr. Ald. WOOD, who courted inquiry, now endeavours to throw the onus on the Court of Aldermen, who, it appears, he wishes to be considered in the light of public prosecutors, or, to use his own language, "persecutors"—the committee having, however, determined that it was alone at the desire of Mr. Ald. THOMAS WOOD that the investigation was instituted, call upon that gentleman to state what is the nature of the charges alleged against him, which he feels called upon to refute, and, accordingly, their labours will be, we presume, confined to those charges only to which Mr. Ald. WOOD may think it necessary to attach any importance—and, as he has already said, upon more than one occasion, that we are utterly beneath his notice, we are led to suppose he will pass by the very serious charges preferred against him through the columns of the MINING JOURNAL. We would, however, recommend him not to attempt a *ruse* of this kind—the charges are serious—they can be established, and he knows it. His reception at Dublin, as alderman and sheriff of London—his representations made there to personal friends of our own, whose correspondence we have to bear out our assertions—the doings at Talacre, and other scenes are painted in colours too vivid to admit of being effaced by the sweeping denunciations of the legal Alderman. We trust that the whole truth will come out—but as the worthy alderman appears to be in the twofold office of prosecutor and defendant, which, we presume is in consequence of his having alike filled the double office of vendor and purchaser, as well as trustee and legal adviser, we must needs wait the issue.

The measures determined upon by the German States, of constructing about 2800 miles of railroad, has naturally created a "sensation," more especially on the continent, and with parties who, interested in coal and iron mines, and as founders or manufacturers, are naturally anxious to keep to themselves the "sweets," and not allow Prussian dollars to be exchanged for English pigs or Welch bars. It appears, from an advertisement in another column, that certain kingdoms and states have to construct about 1500 miles, the outlay on which is estimated at 13,000,000*l.* sterling, or about the amount of our London and Birmingham, Great Western, and Grand Junction lines—the aggregate length of which is about 330 miles. The object of the party, whose advertisement has recalled our attention to the railways projected in Prussia, Saxony, Bavaria, and other states, is that of employing capital in the establishment of an "iron rail manufactory," in a central position, so as to be in a position to manufacture 15,000 to 20,000 tons of rails per annum. The capital required to effect this, it appears, is estimated at 138,000*l.*, the profits arising on which, after payment of the interest, at the rate of 5 per cent. per annum, is calculated at 15 per cent., or, in all, 20 per cent. on the capital embarked. The average price of rails in the interior, we are given to understand, is about 12*l.* per ton; the protecting or import duty on foreign rails, being 20 dollars, or about 60*s.* sterling, per ton. It is, of course, impossible to form a judgment of the value to be attached to an enterprise of this nature, in the absence of other data, than that before us; inasmuch that the value to be attached to the works, after the primary object is achieved, that of supply—the demand for rails, and the cost of which, must be dependent on the rates at which they can be manufactured in England and Belgium—renders it necessary that other information than that before us should be acquired. In noticing the project, our object is more especially to point out the rapid advances making on the continent, and elsewhere, to become independent of a supply from this country, of our metallic products, while we hold out to the foreign miner, and to foreign states, the advantages of free trade; the latter, at the same moment, by their *amended* tariffs, throwing in our way all difficulties, and protecting, as becomes the Government of every empire, the national industry of the country, and promoting the advancement of the development of its mineral wealth.

The numerous instances, of late years, of deception being practised on the credulity of the public, by the payment of dividends, as out of profits, in several undertakings, purporting to be in a flourishing state, whereby the market price of the shares is sustained, while, in fact, the company is in a bankrupt state, cannot be too highly reprobated, and will, doubtless, excite the attention of Parliament on its reassembling. The case of the Bank of Manchester, noticed in a late Number, added to the many which have, from time to time, found place in our columns, must, we feel assured, have the effect of some Legislative enactment being put in force, for the security of the public. True it is, that in the case of joint-stock banks, certain returns are made, and the names of the shareholders registered—the latter being, at all times, responsible to the public for any deposits they may make—and, thus that portion of the public, which are not embarked in the company, are protected, as in the case before us, for although the proprietors will lose upwards of 800,000*l.*, yet the depositors, or commercial world, will not be losers. It will, however, be seen, by the numerous proceedings of late, that, in the instance of the Westminster Discount and Loan Company, not only has discredit been brought upon the several institutions of this nature, but that an unfortunate shareholder, who, unconscious of his liability, in all probability, at the time that he was induced to take perhaps some five shares, or insignificant interest, has been proceeded against, for the recovery of the amount of a bill discounted by the association with a Captain SMITH, who appears to have had dealings in the way of discounts in a wholesale manner, the amount advanced by him being said to be 20,000*l.* Hence the necessity of Legislative interference. There is, however, another class of joint-stock companies, which require the most scrupulous investigation, and over which there should be a controlling power. We refer to the insurance companies, more especially those for granting annuities, or paying sums of money on the demise of the assured. We conscientiously believe that many of these could not stand a searching inquiry, while, by their *reduced* rates, and the superior advantages they hold forth in their alluring prospectus, they do an injury to those established on sound and solid principles.

METHOD OF OBTAINING COPPER AND SILVER IN THE MOST MINUTE STATE OF DIVISION.—A solution of sulphate of copper is heated to the boiling-point, and precipitated with distilled zinc. The precipitated copper is then separated from the adherent zinc by diluted sulphuric acid, and dried by exposure to a moderate temperature. From recently precipitated chloride of silver an exceedingly fine silver-dust may also be obtained by boiling it with water acidulated with sulphuric acid and zinc.—*Poggendorf's Beitrage.*

COLD-BLAST ANTHRACITE IRON.

The Ystalyfera Iron Company beg to hand to the Editor of the *Mining Journal* a copy of Mr. Mushet's elaborate trials on their cold-blast anthracite iron, which they hope he will think of sufficient importance and interest to deserve insertion in his next publication. The great experience of Mr. Mushet, and his skilful manipulations, joined to his rigorous exactness in all the conditions of comparative experiment, will, they think, remove any doubts which such an extraordinary increase in the strength and defensive power of cast-iron, as that shown by their patent elastic steel-iron might otherwise call forth.

The Ystalyfera Iron Company, in placing their iron in the hands of an authority so entirely above suspicion, and so justly relied on by Mr. Crane, have given to the public all the security in their power against error or exaggeration.

The Ystalyfera Iron Company, seeing an assertion made by a correspondent in the *Mining Journal*, signing himself "Another Anthracite Proprietor," that their furnaces usually make white iron—and which, if uncontradicted, is calculated to do an injury to them in their business—think it incumbent on them to deny such statement. Both their furnaces are making grey foundry iron, and they may mention it as an unusual circumstance, that their No. 1 furnace has made no cast below grey foundry iron since the 7th of September last.

Ystalyfera, Nov. 21.

EXPERIMENTS MADE WITH THE COLD-BLAST ANTHRACITE PIG-IRON, MANUFACTURED AT YSTALYFERA IRON WORKS.

BY D. MUSHET, ESQ., M.I.C.E.

Author of "Papers on Iron and Steel."

Breakage of sundry bars of cast-iron, at two feet leverage, made with anthracite and cold-blast.—Bars 1 3-10th inches broad, ·65 inches deep.

1. No. 2 pig-iron, from No. 1 blast-furnace ... lbs.	182¼
2. Ditto ditto ditto	195¼
3. Ditto ditto ditto	193¾
Average breaking weight ... lbs.	190½
1. No. 1 pig-iron, from No. 1 furnace	209¼
2. Ditto ditto ditto	195
Average breaking weight ... lbs.	202¼
1. No. 3 pig-iron, made from blast-furnace No. 1	247¾
2. Ditto ditto ditto	210
3. Ditto ditto ditto	203¼
4. Ditto ditto ditto	179¼
Average breaking weight ... lbs.	210¼
1. No. 2 pig-iron, cast from No. 2 blast-furnace	200¼
2. Ditto ditto ditto	227
3. Ditto ditto ditto	230¼
Average breaking weight ... lbs.	222¼

GENERAL AVERAGE.

No. 2 pig-iron, from No. 1 furnace ... lbs.	190½
No. 1 pig-iron, from No. 1 furnace	202¼
No. 3 pig-iron, from No. 1 furnace	210¼
No. 2 pig-iron, from No. 2 furnace	222¼
General average of breaking weight of cast-iron from the blast-furnaces	206¼
Breaking average of the whole of the Ynisceдwyn blast-furnace iron ... lbs.	159
Of the stone coal furnace iron	170⅔

Breakage of sundry bars of cast-iron, remelted from pig, at a two feet leverage.—Bars 1 3-10th inches broad, and ·65 inches deep, as before.

No. 2 pig-iron, made from No. 1 furnace, and remelted in the cupola with anthracite coal.

1. Bar broke with ... lbs.	265¼
2. Ditto ditto	215¾
3. Ditto ditto	263½
Breaking average of cupola iron ... lbs.	264¼

No. 1 pig-iron, remelted in air-furnace.

1. Bar broke with ... lbs.	241
2. Ditto ditto	241
3. Ditto ditto	226
Breaking average ... lbs.	236

No. 2 pig-iron, remelted in air-furnace.

1. Bar broke with ... lbs.	239
2. Ditto ditto	235
3. Ditto ditto	230¼
Breaking average ... lbs.	234¼

No. 3 pig-iron, remelted in air-furnace.

1. Bar broke with ... lbs.	233
2. Ditto ditto	287½
3. Ditto ditto	245½
4. Ditto ditto	217
Breaking average ... lbs.	233¼
Air-furnace, No. 1, as above	236
Ditto No. 2 ditto	234¼
Ditto No. 3 ditto	233
General average of air-furnace iron ... lbs.	235
Ditto remelted in cupola	264¼
Ditto from the blast-furnace	206¼
Air furnace iron stronger than blast-furnace ... lbs.	34¼
Remelted cupola iron stronger than ditto	48¼
The average of Ynisceдwyn iron remelted in cupola was	208¼

Cast-iron bars deflected and broken, made from No. 2 pig-iron, cast from No. 1 blast-furnace, with anthracite and cold-blast.—Bars 1 3-10th inches by ·65.

Length of bars 5 ft. 1 in. Supports at 3 ft. 9 in.	Breaking weight. lbs.	Deflection. inches.	Permanent set. inches.
1. Bar, No. 2 pig-iron, from No. 1 furnace	538½	1·050	·075
2. Ditto ditto ditto	488	·900	·050
3. Ditto ditto ditto	503	1·050	—
Breaking average	501		
1. Bar, No. 1 pig iron, from No. 1 furnace	534	1·000	—
2. Ditto ditto ditto	546	1·100	—
Breaking average	540		
1. Bar, No. 3 pig-iron, from No. 1 furnace	574½	·85	—
2. Ditto ditto ditto	705½	1·110	—
3. Ditto ditto ditto	644½	1·000	—
Breaking average	641½		
1. Bar, No. 2 iron, from No. 1 furnace, remelted in cupola with anthracite	591½	1·40	—
2. Ditto ditto ditto	718½	1·30	—
3. Ditto ditto ditto	733¼	1·20	—
Breaking average	675		
1. Bar, No. 1 iron, remelted in air-furnace	609¾	1·00	—
2. Ditto ditto ditto	683½	1·15	—
3. Ditto ditto ditto	606¾	1·05	—
Breaking average	643¾		
1. Bar, No. 2 iron, remelted in air-furnace	558½	1·05	—
2. Ditto ditto ditto	592½	1·00	—
3. Ditto ditto ditto	619½	1·00	—
Breaking average	590¼		
1. Bar, No. 3 iron, remelted in air-furnace	650	1·15	—
2. Ditto ditto ditto	784½	1·20	—
3. Ditto ditto ditto	662½	1·05	—
4. Ditto ditto ditto	630	1·05	—
Breaking average	[illegible]		
1. Bar, No. 3 pig-iron, from No. 1 furnace	562½	1·00	—
2. Ditto ditto ditto	534	1·00	—
3. Ditto ditto ditto	548	1·10	—
Breaking average	548¼		

General average of blast-furnace iron.

First Breaking ... lbs.	561
Second ditto	540
Third ditto	603½
Fourth ditto	551¼
Breaking average ... lbs.	560

General average of the remelted iron.

First breakage ... lbs.	571
Second ditto	614¼
Third ditto	625¾
Fourth ditto	607½
Breaking average	604⅞

Breakage of cast-iron bars, 5 ft. 1 in. long and 1 inch square—distance between supports 4 ft. 6 in.

	Breaking weight. lbs.	Deflection. inch.	Set. inch.	Force to resist impact.
No. 2 iron, from No. 1 blast-furnace.				
1. Bar, broke with	604½	2·05	—	1296
2. Ditto ditto	606¾	1·90	—	1093
3. Ditto ditto	606¼	1·95	·175	1167
Average	612¼	1·933		
No. 2 iron, from No. 2 blast-furnace.				
1. Bar broke with	587¼	1·80	—	1037
2. Ditto ditto	594	1·90	—	1128
Average	590½	1·850		
No. 3 iron, from hot-blast furnace.				
1. Bar broke with	634¼	2·10	—	1398
2. Ditto ditto	620¾	2·10	—	1338
3. Ditto ditto	661¼	2·35	—	1565
Average	648	2·183		
No. 2 iron, remelted in cupola with anthracite.				
1. Bar broke with	650¼	1·95	—	1268
2. Ditto ditto	577	2·05	—	1481
3. Ditto ditto	692¼	2·00	—	1357
Average	674	2·03		
No. 1 iron, re-melted in air-furnace.				
1. Bar broke with	663¼	1·80	—	968
2. Ditto ditto	677	1·50	—	965
3. Ditto ditto	692¼	1·80	—	1310
Average	676¼	1·66		
No. 2 iron, remelted in air-furnace.				
1. Bar broke with	617¼	1·70	—	1040
2. Ditto ditto	583	1·80	—	970
3. Ditto ditto	613¼	1·90	—	1164
Average	604¼	1·733		
No. 3 iron, remelted in air-furnace.				
1. Bar broke with	637	2·00	·15	1314
2. Ditto ditto	733	1·90	·13	1390
3. Ditto ditto	731	1·95	·20	1435
4. Ditto ditto	676¼	1·70	—	1130
Average	699	1·888		
No. 2 pig-iron, cast from No. 1 blast-furnace.				
1. Bar broke with	690¼	2·40	—	1671
2. Ditto ditto	679¼	2·10	—	1412
3. Ditto ditto	683¾	1·70	—	1036
4. Ditto ditto	564¼	2·00	—	1109
Average	648	2·05		

ABSTRACT OF AVERAGES.

3 bars, No. 2 pig-iron, from blast-furnace No. 1	622¼	1·933	—	1203
2 ditto, No. 2 ditto, from ditto No. 2	590½	1·850	—	1082
3 ditto, No. 3 ditto, from ditto No. 1	648	2·183	—	1491
3 ditto, No. 2, remelted in cupola	674	2·033	—	1374
3 ditto, No. 1, ditto in air-furnace	676¾	1·666	—	1139
3 ditto, No. 2, ditto ditto	604¼	1·733	—	1047
4 ditto, No. 3, ditto ditto	699	1·888	—	1319
4 ditto, No. 2 iron, from No. 1 blast-fur.	648	2·050	—	1304
	644¼	1·916		1255

[We are compelled to defer the insertion of the remaining tables, which embrace Comparative Statements of Experiments, made by Tredgold, with remelted iron; those of Mr. Mushet, from the iron produced from the blast-furnaces at Ystalyfera works; as also the same iron remelted in the air-furnace and cupola, as well as that of the Ynisceдwyn works; the further comparison between the strength and deflection of the Ystalyfera iron, made with cold-blast and anthracite, and those experiments made with the same iron, manufactured with hot-blast, with other tabular matter, and the results of Mr. Mushet's observations, will, therefore, appear in our next.]

ORIGINAL CORRESPONDENCE.

COMPARATIVE PROPERTIES OF HOT AND COLD-BLAST IRON.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Having noticed several articles in the *Mining Journal* on the comparative properties of hot and cold-blast iron (in one or more of which reference is made to these works), and as the deductions which may be drawn therefrom, on the assumption that the representations so made are founded on correct data, would be calculated to mislead, we have caused a series of experiments to be carefully made, the results of which are embodied in the accompanying table. We have no further desire than to refute misstatements, and at the same time to enable those interested in the trade to arrive at correct conclusions, and we consider it sufficient to furnish you with these results, which you are at liberty to use as you may think fit. For the same reason, we avoid any comparison as to the properties, or qualities, of the respective descriptions of iron produced at other works, which might lead to a correspondence we are not disposed to enter upon. A reference to the article in your paper of 6th August, an extract from which appears in the letter of a correspondent, on the 5th inst., with comment thereon, renders it necessary that you should be undeceived, as well as that our interests should be duly protected. GRAHAM & CO.

Milton Iron-Works, near Sheffield, Nov. 16.

EXPERIMENTS UPON HOT AND COLD-BLAST IRON, MANUFACTURED AT THE MILTON WORKS.

HOT-BLAST.

	Size.	Blows.	Curvature.	Observations.
Rolled	1½ square	10	½-in.	Neither heated nor swaged. No appearance of fracture. Section at bend 1 7/16—1½.
		50	2 1/16	
		100	3 7/16	
Ditto	1½ square	10	1½	Heated red and swaged till cold—reduced 1/16 inch. No appearance of fracture. Section at bend 1 5/16—1½.
		50	2 1/16	
		100	3½	
Refined	1½ square	10	½	Neither heated nor swaged. No appearance of fracture. Section at bend 1½—1½.
		50	2 1/16	
		100	3½	
Ditto	1½ square	10	¾	Heated red and swaged till cold—reduced 1/16 inch. No appearance of fracture. Section at bend 1½—1½.
		50	2	
		100	2 1/16	
Rolled	2½ round	10	½	Neither heated nor swaged. No appearance of fracture.
		30	¾	
		50	1¼	
Ditto	2½ round	14	1/16	Heated red and swaged till cold—reduced 1/16 inch full. No appearance of fracture.
		21	1/16	
		30	¼	

COLD-BLAST.

	Size.	Blows.	Curvature.	Observations.
Rolled	1½ square	5		Heated red and swaged till cold—reduction 1/16 inch. Broke across at fifth blow.
Refined	1½ square	1		Heated red and swaged till cold—reduction 1/16 inch. Broke across at first blow.
Ditto	1½ square	10	½-in.	Neither heated nor swaged. No appearance of fracture. Section at bend 1½—1½ in.
		50	2½	
		100	2 1/16	
Rolled	1½ square	10	½	Heated red and swaged till cold—reduction 1/16 inch; reheated and allowed to cool gradually. No appearance of fracture.
		50	1½	
		100	2 1/16	
Refined	2½ round	10	1/16	Neither heated nor swaged. No appearance of fracture.
		30	½	
		50	1½	
Rolled	2½ round	10	½	Heated red and swaged till cold. No appearance of fracture.
		30	1	
		50	1½	

*** In making the experiments the bar was, in each instance, placed four inches over the anvil, and a hammer, of [illegible] weight, used in striking the bar.

N.B.—We have been favoured with a report of several experiments recently made with Milton iron, by Messrs. R. and W. Haw[illegible] (engineers), of Newcastle, which exhibits results very similar to [illegible], as the tests were taken with a view to comparison with [illegible] do not trouble you with them. GRAHAM & CO.

THE DISCOVERY OF BLACKBAND IRONSTONE AT NANTYGLO.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In one of the *Mining Journals* lately, a communication was made to the public, of the discovery of a blackband ironstone by the Messrs. Bailey, of Nantyglo. I feel called upon in part to correct your statement, and to inform you, that I am the person who first discovered this class of carboniferous ironstones, and applied it to the manufacture of pig-iron, at my own iron-works in Scotland, in 1801. This mineral is now well known by the name of "Mushet's blackband," and, in the same district, where it was discovered and first used, more than fifty blast-furnaces have, in consequence, been erected, and are deriving their daily supply from its resources. I may, therefore, be excused, if I feel a little anxious that the real author of the present discovery, should be identified with the same person, who, many years since, first ascertained its existence in Scotland, and conferred upon his country so great a national boon. To prevent any mistake upon this head, I take this opportunity of stating, that the blackband ironstone in the lands of Messrs. Bailey, was discovered by me, in the month of May last, and that its existence was altogether unknown to those gentlemen, until last month, when I communicated the fact to Mr. Crawshay Bailey, and sent him specimens of the ironstone, and iron derived from it. DAVID MUSHET.

Coleford, Nov. 24.

ON THE MANUFACTURE OF IRON WITH ANTHRACITE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Your last publication contains a letter from "Another Anthracite Proprietor," which is, I apprehend, intended as an answer to the one addressed to you by me, which you were good enough to insert in your previous Number. As I am of opinion that the matter under discussion cannot be in any way enlightened or advanced by recrimination, or the imputation of motives, or of want of truth, I shall confine myself, in this reply, as closely as possible to the question at issue, without noticing those parts of your correspondent's letter which are not relevant to it. I will presume, therefore, for the purposes of this discussion, that his motives and objects are identical with my own—viz., the legitimate advancement of anthracite as a fuel for iron-making in the public estimation. I have no object in unduly overrating Mr. Budd's process, or underrating that of Mr. Crane; it is my desire to give to each gentleman his full and due meed of credit, and I will charitably hope that the other "Anthracite Proprietor" is similarly actuated—anything that may appear in his letter to the contrary, notwithstanding. And now to the points on which we are at issue. The first exception which your correspondent takes to my statement, is, that "Mr. Budd's process does not extend to the anthracite veins generally, but to one of three feet in thickness only;" and he accuses me of "overstepping the bounds of truth," in calling it "the manufacture of iron by *anthracite*, when, in fact, it is only by one vein, and that a very small one." I believe that your correspondent is in error in supposing that only one vein of coal is used in the furnaces at Ystalyfera; there are, at least, two veins employed for that purpose, but, even were there, as he states, only one vein, *quantum valeat?* what is the value, or even the meaning, of his objection? It is evident that he does not intend to say that the coal employed is not anthracite, and yet, upon any other construction of his meaning, I am wholly at a loss to comprehend the application of his argument. It is perfectly well known, that the Ystalyfera Company are, and have been, using with the cold-blast precisely the same veins of coal that they formerly used with the hot—that, in fact, they have made no change whatever in the fuel employed, for they have had no reason to do so. It is not asserted that they have tried any other vein of anthracite, and that it has failed—I apprehend that they have made no such trial. The veins which they have for years used in their furnaces work perfectly well—Why, therefore, should they make an alteration? And, let me ask your correspondent, if he is not aware that the Ynisceдwin Iron Company are, at this moment, using one of these very veins on their anthracite furnace with the hot-blast, and that, until they had recourse to it, they were never able successfully to work their No. 1 furnace without a mixture of coke? And is there anything unusual in the superior applicability of certain veins to furnaces? Has your correspondent never heard, that at Merthyr three veins only of the many found in that district are considered to produce what are termed furnace coals, and that one in particular is held to be greatly superior to the others for such purposes? I contend, therefore, that the assumption that the cold-blast process is not generally applicable to all anthracite veins which are calculated for making iron, is entirely without foundation. Many of these veins—the Brass vein, for example—have not been found to answer with the hot-blast; but, would it be just to say, from this circumstance, that Mr. Crane's process is not applicable to anthracite? But your correspondent says, that, "if the eighteen feet, or big vein, were put on the (cold-blast) furnace, it would be inevitably 'gobbed,' or shut up." Why the eighteen feet vein should produce this effect, he does not condescend to explain. I can see no reason for presuming it, unless it has already produced such a result upon the hot-blast furnaces at Ynisceдwyn or elsewhere. I have not heard that such has been the case; and yet, upon any ground short of this, the assumption seems gratuitous. Again, he objects that the vein employed at Ystalyfera is only a three feet vein. This seems an odd sort of argument, but, if your correspondent seriously considers that a vein of three feet in thickness must be an unimportant one, he can know very little of the coal districts of England, or even of his own vicinity. He, probably, is not aware that more anthracite is worked from three feet veins in the Swansea Valley, than from all the other anthracite veins put together, and that the majority of the anthracite shipped in the port of Swansea, is the produce of veins not exceeding three feet in thickness. He does not know probably that the best and most extensive collieries in the north of England are on three feet veins; but it is useless to pursue such an argument.

Your correspondent next proceeds to the question of the relative advantage in point of cost of the cold and hot-blast processes, upon which subject he entirely disagrees with the opinion expressed in my letter. He states that at a former period the furnaces at Ystalyfera turned out a much larger quantity than fifty tons each per week, and that, on one occasion, nearly seventy tons were made. This I very much doubt; I think if your correspondent will make further inquiries, he will find that I was quite correct in my statement, that their average make never exceeded fifty tons per week of grey iron. Perhaps they may occasionally have made a larger quantity of white and other "forge" iron, when the furnaces were out of order, and on a "scour," as all furnaces will, under such circumstances, yield a larger quantity of inferior iron; but of grey foundry iron, I am confident I have not understated their make. I should have supposed, too, that your correspondent has equally over-rated the make of the cupola at Ynisceдwin, but upon that point, I will not enter the lists with him. He is, beyond doubt, an authority there, but it will be a novel fact, and one which will surprise the ironmasters of the hills, to find that at Ynisceдwyn, a cupola-furnace, measuring only ten feet across the boshes, produced with (as I presume from what your correspondent says) an inferior pillar of blast, about fifty to sixty tons of good iron per week, for many weeks. It is, I believe, an unprecedented circumstance in the annals of iron making with any fuel.

There is no doubt that the effect of hot-blast on all furnaces is to increase the make of iron, but I still contend that the decrease at Ystalyfera, in consequence of taking off the hot-blast, is not greater than from ten to twelve per cent. As far as that decrease goes, it is a circumstance in favour of the hot-blast process, and to this advantage must be added, the increased consumption of large coal in the furnace. Upon this point your correspondent says, that he is told, upon authority which he cannot doubt, that with cold-blast equal quantities of coal and calcined ore are put upon the furnace;* and, he goes on to say, that, "consequently, it takes about fifty-three or fifty-four cwt. of coal to make one ton of iron, or about a ton more than with the hot-blast." Surely, there is here a mistake in the figures; your correspondent must mean forty-three or forty-four cwt. to the ton of iron. No one, I imagine, knows better than himself, that the furnaces at Ynisceдwyn yield, upon an average, about 45 per cent. of iron upon the calcined ore; and when much foreign mine is employed, even 50 per cent. The mines used at Ystalyfera are of precisely the same description. Now, taking even your correspondent's statement, that equal

* I am informed, upon authority which I have no reason to doubt, that the following is a correct statement of the charges of coal and calcined ore upon the hot-blast anthracite furnaces at Ynisceдwyn, and the cold-blast furnaces at Ystalyfera—viz., at Ynisceдwyn, [illegible] cwt. of coal to [illegible] cwt. of calcined mine, or, at [illegible] per cent., on the [illegible] cwt. per ton of iron; and at Ystalyfera, [illegible] cwt. of coal to [illegible] cwt. of calcined mine, or, at [illegible] per cent., on the [illegible] cwt. per ton of iron, an [illegible] of coal in the furnace in favour of the hot-blast process—an advantage certainly not [illegible] to much more than [illegible] per ton of iron." This requires no comment.

quantities of coal and calcined ore are put upon the furnaces at Ystalyfera, this would give a consumption of from two to two and a quarter tons only to the ton of iron; and if fifty-three or fifty-four cwt. is about a ton more than the hot-blast furnaces use, it results that the actual increase in consumption of coal in the cold-blast furnaces, cannot, at the very outside, be more than ten cwt. to the ton of iron, or about 2s. or 2s. 6d. in money. And now how stands the case? Why, that against an increased cost of from 2s. to 2s. 6d. for coal in the furnace, and a reduction of 10 to 12 per cent. in the quantity made, which reduction affects the standing charges only, we have to place the saving of the fuel employed in the hot-air stoves, the wages of the firemen attending them, the cost of their erection, which is equal to the cost of the furnace itself, the expense of their continued repairs (and, I would ask, how many stoves were torn down and entirely rebuilt in the Ynisceedwyn and Ystalyfera works in the last twelve months), and the improved quality of the iron made. I leave it to those conversant with the iron manufacture, to judge, from these premises, which must be the cheaper process. It certainly requires something more than an unsupported assertion, that a sacrifice of something like a 1000*l.* per annum per furnace, would be the result of substitution of the cold for the hot-blast process, to upset these facts.

With regard to the relative qualities of the iron made by the cold and hot-blast processes, I quite agree with your correspondent, that something more is required on that subject than the vague assertion of either of us. Until Mr. Mushet's experiments are made public, therefore, I am content to let the matter rest upon the basis on which I placed it in my former letter—viz., that as cold-blast iron is invariably, and with every fuel infinitely, stronger and better than hot-blast iron made with the same materials, it is a natural inference that cold-blast anthracite iron will be, in the same proportion, superior to iron made with anthracite by hot-blast. Your correspondent appears, by implication, rather than direct assertion, to desire to lead to the conclusion that the Ystalyfera furnaces have usually made white iron since the adoption of the cold-blast process. This is notoriously the very opposite of the fact, as your correspondent will easily ascertain, if he takes the trouble to make the inquiry, with a desire to obtain correct information.

I think I have now satisfactorily disposed of the statements and arguments contained in "Another Anthracite Proprietor's" letter. I have no desire to engage in a newspaper controversy, and shall not again trouble you upon this subject, unless I think that by doing so I can forward the interests of anthracite, which I have very much at heart.

AN ANTHRACITE PROPRIETOR.

Swansea, Nov. 21.

ON THE MANUFACTURE OF IRON WITH ANTHRACITE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I observe in your Journal of the 12th inst., a few remarks respecting Mr. Budd's patent for the manufacturing of iron with anthracite coal, by "An Anthracite Proprietor." I beg leave to say that gentleman is saying too much upon points. He remarks that Mr. Budd has accomplished that which was held to be an impossibility—that is, the manufacturing of iron with anthracite coal, with cold-blast. I am at a loss to know who or what person held this opinion; but the gentleman, who styles himself "An Anthracite Proprietor" dare venture to express himself such. I beg leave to inform that gentleman that the same thing was done in America in 1830 (twelve years ago) in the State of New Jersey; I, myself, superintended an iron-work only forty miles from New York, where we, with cold-blast, worked anthracite coal in the smelting of iron, with a small blast-furnace, or, as some would call it, a large cupola, about sixteen or eighteen feet high to the charging place, and the thing worked very well; this was in 1830—certainly this was one of these impossible things. But there is another thing that we accomplished with the anthracite coal; we constructed a furnace for heating iron; and we worked two furnaces, as they are called in Wales, "balling-furnaces," and with anthracite coal, and finished from eight to ten tons of 1¼ inch round bolt per day, and all heated with anthracite coal. I suppose this is one of Mr. Budd's impossibilities. I have left America now some four or five years, and I believe the same thing is going on now in 1842. I have long been a reader of the *Mining Journal*, but never wrote a line to appear in your useful Journal before; you are quite at liberty to correct my remarks as you think proper.

Nov. 22. A LOOKER-ON.

MR. NEILSON'S HOT-BLAST PATENT.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Referring to my letter of the 10th instant, and your remarks thereon—I first premise that I do not anywise refer to the operation of hot-blast on anthracite—that, I said, "is being proved;" it is its adaptation to bituminous coal I apply my remarks, and not "hastily at conclusions." It has been said a ton of iron has been produced by two tons of coal, using hot-blast, whilst from 7 cwt. to 9 cwt. additional has been used to heat the hot air furnaces—making 2 tons 7 cwt. to 2 tons 9 cwt., besides, as before-intimated, the expenses of pipes, furnaces, and workman's wages. Now, iron is being made with less than 2 tons 10 cwt. of coal, without any extra expense, and by cold-blast—then, I ask, where is the boasted advantage of hot-blast, setting aside the asserted inferiority? A. B.

Wellington, Salop, Nov. 21.

MR. NEILSON'S HOT-BLAST PATENT.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to trouble you with a few remarks upon a letter signed "A. B.," relative to Mr. Neilson's hot-blast patent, which appeared in your Journal of the 19th instant. On the question of the propriety of a national testimonial to Mr. Neilson, I shall not enter; but, surely, no one who is not wilfully blind to the clearest and most notorious facts, can doubt that the adoption of the hot-blast process has been a national benefit. There is no manufacture more exclusively national than that of our iron, since in it we are indebted to no foreign production, while, as a source of wealth—a field for industry—all must admit its great importance; every application, therefore, in the manufacture, which effects a saving in the consumption of the material used—which enables inferior materials to be worked, that would otherwise have lain useless, and, consequently, valueless (no matter in what particular part or parts of our island it may have been done)—must be a national advantage, and such has been the result of the application of the hot-blast. Nor does it affect this conclusion in the least, to point to the over-trading that has resulted from the greater facilities afforded the iron trade by such application, since an abuse of a benefit does not make that benefit in itself less valuable.

"A. B." certainly has a peculiar, though not a very ingenious, manner of getting rid of the facts which stand in the way of his conclusions—viz., to deny them. Thus he says:—"As to the expression, that it required nine tons of coal to make one ton of iron in Scotland previous to its (the hot-blast) introduction, I do not believe it." I would refer "A. B." to the report of M. Dufrenoy, on the use of hot air in the iron works of England and Scotland in 1834, a translation of which was published in 1836, wherein are statements taken from the "yield-books" of various works in Scotland, Yorkshire, Derbyshire, Staffordshire, and Wales, which, as the works and proprietors are specified, have every chance of being correct—indeed, had they not been perfectly authentic, they would very soon have been detected. One or two of these statements I will make an abstract of here, so as to enlighten "A. B.'s" unbelief. First, as to Scotland. It appears the consumption and yield of No. 3 furnace at Calder Iron Works, for a period of three months, in 1828, with *cold-blast*, was—Coke 1670 tons, to make which, from the coal, there was a loss of 53 per cent., thereby making consumption of coal equal to 3711 tons; of carboniferous ore 1400 tons, of limestone 301 tons, and the produce of Nos. 1, 2, and 3, pig-iron, 472 tons. This statement shows 7 tons 17 cwt. of coals to have been used in the furnace to a ton of iron, to which must be added the consumption of the blast-engine, stated at 24 cwt. to a ton—equal, in all, 9 tons 1 cwt. of coals to a ton of iron, and the limestone appears to be 1¼ cwt. to a ton of iron. Again, it appears that the consumption and yield of the same furnace and the same works, for a like period of three months, in 1832-3, with *hot-blast*, was—Coal 1140 tons, ascertained upon ore 1383 tons, limestone 183 tons, and of pig-iron, Nos. 1, 2, and 3, equal to 642 tons. This shows 2 tons 2 cwt. of coals to have been used in the furnace to a ton of pig-iron, to which add consumption of blast-engine, stated at 14 cwt. to the ton (for some engine blow more furnaces, and such furnace made more iron); also, consumption of heating apparatus, 6 cwt.—equal, in all, 3 tons 4 cwt. of coals to a ton of iron, and the limestone is shown to be ¾ cwt. to a ton of iron. Here, then, is a saving of 3 tons 12 cwt. of coals, and 24 cwt. of limestone on every ton of pigs! In Derbyshire it is also stated as taken from the yield-books of the works; that at Butterley Works, with *cold air*, the consumption of coal in the furnace was 5 tons 10 cwt., and with *hot air* (including 6 cwt. for heating apparatus) equal to 2 tons 18 cwt. At Codnor Park, with *cold air*, in the furnace, 5 tons of coal were consumed to the ton of pig-iron, while with *hot air* (including heating apparatus, 6 cwt.) only 2 tons 15 cwt.—showing very little more than half the quantity of coals used with hot air process than with cold air.

It is true, that such results have not everywhere taken place; it is also true, that with some materials iron has been produced by cold-blast, with so small a consumption of coal as three and a half tons to a ton of pig iron, or even less; but this by no means militates against the positive benefit which has resulted in very many places. But for the application of hot-blast, the great bulk of mineral property in Scotland would have been comparatively of no value, because unavailable; and many millions of tons of material in England, which is now using, would have been wholly unprofitable—as, for instance, that of North Staffordshire, some parts of South Staffordshire, and some parts of Shropshire. This, too, is without taking into consideration the question of anthracite, having only reference to bituminous coal. As regards the quality, in most cases, the pig-iron, made by hot-blast, is considered less stout than that produced by cold-blast, although, in some cases, I have known it to be the contrary; but when it is a fact beyond dispute, that there is now as much hot-blast pig-iron made as of cold-blast, and that that pig-iron is used not only for foundry purposes, but also converted into good malleable iron, it cannot be of so much less value, compared with cold-blast iron, as "A. B." would have it inferred. Such results as these could never have been arrived at, if "A. B.'s" conclusion of the hot-blast, having been "tried and found wanting," had the smallest pretension to correctness. G. T.

Glasgow, Nov. 22.

ORIGIN OF MINERAL VEINS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Having observed in the lead mines of the north of England that the mineral is only found in the veins against the great limestone beds (above them nor below them we seldom or ever find any lead), I should feel obliged by some of your intelligent correspondents throwing a little light on this subject. Neither Hutton nor Werner's theories give a satisfactory explanation on this head. I have often seen, in old workings, lead-like needles vegetating from the limestone beds, but not from the other beds. Our north and south veins, in the north of England, are not so productive as the east and west veins, and I have often seen, on the sides of the north and south veins, slicken sides, or polished and striated faces, which I do not remember seeing in the east and west veins.

Cornhill, London, Nov. 24. *V.* TREADALE.

ORIGIN OF METALS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In your last week's Journal, a question is put to some of your intelligent correspondents, relative to the origin of metals; or in what state, and where they existed, before they found their way into the present veins. This is an interesting question, not only in the economy of mining, but also in geological dynamics. There is a beautiful, and, I may say, a rational theory, lately promulgated by a scientific and practical gentleman, who has been engaged in some of the foreign mines (Mr. Hopkins), which theory, I understand, is now undergoing an investigation by some of our first geologists. According to this gentleman's theory, it appears that the mineral *existed in the rock* as one of its elements, and that all the *east and west* lodes or veins, joints, &c., &c., are *fractures* resulting from a force (called magnetic), acting horizontally, and more or less parallel to the meridian; and that these classes of veins are, therefore, gradually opened and filled by the crystallising power of the metalliferous ingredients, acting in the same direction as the tensional force—that is, *northward*—oozing, as it were, out of the rock from the *south side of the fracture*. This accounts, in a most remarkable manner, why the mineral contents of east and west veins correspond to the nature of the rock in which they are inclosed, and why they produce parallel bunches—that is, in the same meridian. This fact I have observed for many years in Cornwall. The above points to us the source, namely, that the same north and south metalliferous leader of rock feeds each fracture. The north and south veins are divisional planes, and not lines of fractures, and as they are situated in the same direction as the metalliferous currents, they present no resistance, nor do they command any surface of rock for supplying them. However, they are occasionally supplied from the south by means of south-east and south-west branches coming into them; without these branches, or routs as it were, the north and south veins are not worth working, and, therefore, of little value, which is the case in the mines of Cornwall. Whereas the lodes of fractures—that is, east and west—being at right angles to the metalliferous currents, present resistance, consequently causing concentration, and rendering them, as they really are, the most productive and important metalliferous deposits. The north and south veins, joints, and the lamina of the primary rocks, according to Mr. Hopkins's theory, have been formed, *and are now forming*, vertically (and not horizontally, as we have been led to suppose by some authors), by means of the elementary ingredients, principally mica, of the fundamental base penetrating the rocks by polar forces from south to north. The lead ore in the veins of the carboniferous limestone, in the north of England, is invariably found *only opposite the great limestone beds*. Neither igneous eruptions from below, nor aqueous deposition from above, can account for the above fact, but the theory in question readily gives us a satisfactory explanation—namely, that the vein is filled from the side wall, according to the nature of each bed. The limestone, therefore, appears to be the only metalliferous bed, from which the vein is supplied with the sulphuret of lead. Anticipating that this most rational and simple theory will shortly be made public, through the medium of your interesting Journal, I am, Sir, yours, &c.,

Portland place, Nov. 22. A MINING CAPTAIN.

ON THE FORMATION OF MINERAL DEPOSITS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—There appears to be a great deal of geological, mineralogical, *electrical*, and I don't know how many other reasons and opinions given, of the formation of the mineral deposits in our own and other countries; first, second, and third, and I don't know how many formations, and so on, but which we, ignorant miners, cannot possibly understand, neither do I believe, that one out of every 500 that sit two hours together to hear lectures upon that very plausible subject, understand, or get one jot the wiser by hearing them; for many of those lectures, delivered by those great mineralogists that continually of late are showing off about the kingdom; to us miners such stuff is often downright nonsense; but then, of course, we are ignorant men—our craniums are as thick and as hard as the rocks we work under—Oxford and Cambridge are the places, say some, to get mining knowledge. * * * Please to ask those geologists and mineralogists a few straightforward questions, that we miners and colliers may get some share of understanding in our own business. I will not ask them anything about their first formation, but their second, by which they account for upthrows, downthrows, and eruptions, of all kinds, to earthquakes, volcanoes, and such violent things as these confusions would produce. Please to ask those great talkers—for they can talk well—if ever, since they left Oxford or Cambridge, they saw, in any mineral basin in England, any such effects in the stratification, within the bowels of the earth, as earthquakes and other terrible convulsions in Nature would produce? and I am convinced they will tell you no; nor they never did see such confusion within the earth as such things would produce. Everything is correct there—it is simple, yet grand—the stratification of the earth in those mineral deposits are placed one on the other as correctly (some thick and others thin) as we could place books, bricks, or tiles, one upon another. Now, would earthquakes and volcanoes have left them so? Would they not have been torn, and tossed, and jumbled together in a confused state?—I say these men never saw them so mixed together. I know there are upthrows and downthrows in these mineral deposits; I have seen them throw up or down from 200 yards to two inches, and sometimes slight confusion attending some of these, but, generally, nothing more than where the vein is lost at them; the confusion will direct the way to seek for it again, and, generally, through those changes, as we call them, might at times be an injury to the locality they are found in (but often they are a benefit), still, on taking the whole district around, they are often a blessing. To a thinking practical miner, the beauty, the regularity, and harmony, manifested in the strata of the earth's formations is admirable. Then, again, they will tell you coal is a combination of vegetable matter. I would ask them, what are those tremendous rocks, sheets, and slate formations, we continually find placed above the coals? Are those vegetable matter too? They are often between the coals and vegetables on the earth's surface.

I will, Sir, give you a new theory of the mineral stratification of the earth—at least, new for anything that I know. I will begin at the mountain limestone; wherever that limestone shows itself at the surface, and dips in the same direction as the surface of the earth rises, and that rise sufficient to receive the coal formation, the coal formation will most surely take place. Now, that is from Nature to be expected, as truly as if we plant a tree, and expect that tree to produce its own natural fruit. The same with the next formation below—the old red sandstone; if you can see the top of the old red sandstone follow the dip of it, and, if the surface rises in the direction of the dip of it, you will surely find the mountain limestone, and so on through all the stratification of the earth, with this exception, where upthrows or downthrows derange the regularity. One thing I would also mention, that, generally, where the crop of the strata is a south or south-east crop it throws out most rapidly, and I have seen it, in some instances, go out to crop very rapid to the north and north-west; when the surface strata goes out to crop in that rapid form the whole stratification under it follows it up too, which occasions those towering rocks and mountain ridges seen with the strata formation standing upon an end. Other mountain masses, that rise immensely high, have their formation as correct as any level land in flat districts, their bases resting upon some known strata; all the others, from the base to the summit, may be numbered as we number courses of bricks in a wall—so much for my theory of the earth.

In your notice of the celebration of the union of the Leeds Literary and Mechanics' Institution, and the address delivered by the Rev. W. Buckland, the following observations occur:—He spoke of "the bursting of one coat of the great onion occurring—it was by all the laws of physics accompanied by a series of fractures. In consequence of these phenomena, they had five great transverse fractures eastward and westward, that had been the causes of the valleys, down which flowed the magnificent rivers which united in the Humber. They had the river at Wakefield, the river that passed through Leeds, the Wharf, the Nidd, and the Swale, and every one of these rivers was generated by transverse fractures, which in the main—not literally—were at right angles to the great line of elevation. Above all, they had the fracture, the great chasm, by which they went from this town, through Sowerby, Todmorden, and Rochdale, to Manchester. What was that?—It was that great chasm, that great snap of the backbone, when the great giant laid prostrate in the earth was brought up 1200 feet to be quickened into a state of activity, and to present them with those beds of coal which had been the means of carrying into operation their ingenuity and mechanical invention." A great upthrow in the strata of 1200 feet would just do what Mr. Buckland said it had, but, before that upthrow took place, those very coals he was then speaking of were buried very deep in the earth. Now, would our modern mineralogist say that those coals that had been raised 1200 feet from their primitive bed, and, perhaps, now half that distance down to some of them—I say, will Mr. Buckland, or any other of the same school, say that those coals were formed of vegetable matter?—I think they cannot say so. And the bursting that he describes as taking place, and causing the valleys to receive the rivers, I wish to know how far the bursting, or rent, went down into the strata of the earth there—he says through the first coat of the great onion; I wonder how far down that was, because I have seen very deep valleys, between two high hills, in South Wales, in the South Wales mineral basin—and, indeed, not a few of them in succession in crossing that district—and rivers, great or small, in the bottom of every one of them. Were those valleys, I would beg leave to ask him, made by bursting, &c.? If they were, the bursting went no lower than the bed of the rivers; for I have worked under the beds of some of those rivers, and always found the strata as perfect under the rivers as I found it under the mountain tops. Mr. Editor, if those Oxford and Cambridge gentlemen would just confine themselves to the searching out the stratification of the earth with the view of assisting the practical miner, receiving the formation of the earth, *as it is*, and as it came out of the hand of the Creator, with the exception of the change the general deluge made in its surface, which was the true agent that deepened and bursted (as Mr. Buckland has it) the valleys, they may sometimes be of use to the miner, in calling his attention to the opening of new mines; but they do, and will, mix up so much mystical reasoning with useful knowledge that it bothers our hard heads, and puts us sadly out; and, if they don't write to profit the practical miner, and assist him in his operations, to whom else is their writing and lecturing of any use? What real service can they be doing in large manufacturing towns, talking two hours at a time to manufacturing men? If they are to be of any real service they should lecture in the great mining districts, that the miners may have the benefit of them. The sum and substance of the matter is this:—The Almighty Creator has done all things well, and I believe it was done, *finished* (no second formation), in six days, and then rested on the seventh. I don't know what a day is with the Lord—it might be 1000 years—but this I do know, that what is done is done right, for the use of man, even the formation of the earth. If we begin at the wrong end it is through our ignorance—there is a right way always into the bowels of the earth—but man is a short-sighted creature.

Bloxwich Iron Works, Nov. 11. THOMAS DEAKIN.

[Our correspondent appears disposed to go "the whole hog." We insert his letter, because, in one respect, we agree with him, that the labours of our geologists would be more useful, if their results were communicated to the miner rather than to the manufacturer. Mr. T. Deakin, however, like many others, would overturn not only all theories but his own, but the results of a practical research and inquiry, and involve us in questions of theological controversy. The present must be the last letter in which reference can be allowed to subjects which embrace questions beyond the reach of human knowledge, and which should be left to other interpretation than we can presume to approach. Of what "formation" our correspondent considers himself, we know not—perhaps the primary. We can hardly believe Mr. Thomas Deakin ever worked "under the beds of rivers," under the circumstances stated.]

EXTRAORDINARY MINERALOGICAL PHENOMENON.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In reference to the "extraordinary mineralogical phenomenon" noticed in the *West Briton*, and in your last week's Journal, I think there can be little doubt that the substance discovered by the miner was [illegible] stone, or steatite. I send you herewith a specimen very similar in appearance to the description given by the correspondent of the *West Briton*, it was found in Mexico, with an ore of manganese, some of which appears on the specimen. Steatite occurs in various parts of Mexico, in connection with silver and iron veins, and with argentiferous manganese in the instance I have brought before you. J. P.

London, Nov. 23.

LEVELLING—THE EARTH'S CURVATURE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to hand you another rule in answer to Mr. Bulge's question on the earth's curvature, which is deducible from my process of last week, and which did not then occur to me; it is, square the length in miles, and multiply by eight—the answer is then had in inches. Of course the remark from the opposition may be, that this is not to be trusted to long canals—on this I am prepared for further remarks. Try it to the question—thus, 2 miles × 2 miles = 4 × 8 = 32 inches, as before.

Tuckingmill, Nov. 21, JOHN PHILLIPS.

ON LEVELLING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I feel it to be incumbent on me to make my acknowledgments to your correspondents, who have so promptly and satisfactorily answered my question on this subject, relevant to the curvature of the earth, and believe the development will prove beneficial to many of your readers, and, consequently, advantageous to mining; for I [illegible] think that some capital errors have taken place in cutting [illegible] water courses, in consequence of the difference between the *true* and *apparent* level not being well understood. One of the writers on this point says it is of little practical use, in the case I have given; but I beg to say, that a gain of 3 ft. 9 in. is of considerable value in that survey. [illegible] some writer inquires how it is that the rules agree so pretty for short distances, when they are not mathematically true, when a great extent is used? I dare say this gentleman is quite aware of the fact, that the difference between the sine and the first few miles of a *curve*, forming the circumference of a circle of 25,000 miles in circumference, is almost imperceptible, and, therefore, the theorems given are sufficiently accurate for practical purposes. The judicious observations of "A Cornish Miner," arising from the consideration of this subject, relative to the adjusting of [illegible] levels, deserves general attention; but as a sort of water, or a [illegible] extent, and fit for the purpose, is not always at hand, I beg to state that for 100 yards, I think it will be found the fall one quarter of an inch should be allowed for the curvature, or 2,5-64 of an inch. As your [illegible]

Nov. 19.

leigh correspondent was the first who gave the solution, I presume it is right that he should have the merit of it, and not a jot the less because it is the application of an old, plain, and well known operation. As this is an important subject to mining, and all are not favoured alike with mathematical knowledge or ideas, it will, I doubt not, be acceptable, if some one of your correspondents will give a clear and general rule for *applying* the amount or quantity of curvature in all cases of levelling, so that no one may fall into the double error of adding the curvature to the wrong end of his course of levelling.

JOHN BUDGE.

Carlington, Nov. 22.

PRACTICAL KNOWLEDGE OF MINING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—A person who calls himself "Geologicus" wants to know some particulars concerning dykes, faults, &c., with other things, which the practical experienced miner might furnish him with. You tell him that he must be well aware that the series of questions he huddles together cannot be replied to; *his* ideas of dislocations (you say) appear to us to be of a vague nature; a slight knowledge of the coal-fields of Staffordshire, those in North and South Wales, with the mineral lodes of Cornwall, Derbyshire, and other districts, would convince him that there is no possibility of generalising an answer, as he puts the question." I don't see that the question requires generalisation; a separate description of each district would do for your correspondent. Now, I know there is more than one practical miner in each of the above districts that could give the required information, but that won't do for the press, except mixed with the nonsense of Kirwan, Hutton, Bakewell, Buckland, and De la Beche, and all that school; those people write, and might write, what they please about the earth's surface, but no practical miner can behold their writings about the bowels of the earth without considering a deal of it an insult to common sense.

THOMAS DEAKIN.

Blaenavon, Nov. 22.

BOLANOS MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In the prefix to the prices of mining shares, in your paper of the 9th of October, you say, "Bolanos has made a remittance of 29,000 dollars, with every prospect of its being one of the last;" which gratuitous remark has been injurious to the property, inducing some persons to part with their interest, preventing others, to my knowledge, from becoming proprietors, and causing uncomfortable feelings, needlessly, to many who are such. You will, I am sure, be glad to correct the misrepresentation which has been made to you, by allowing the insertion, in your next Journal, of the annexed statements:—First. An abstract of the advices received on the 19th inst., per the *Clyde*, from the company's two districts of Zacatecas and Bolanos; and, secondly, the financial position of the company, closed by a short reference to the character of its present mining engagements.

A SHAREHOLDER.

London, Nov. 24.

[The statements accompanying the letter of our correspondent will be found under the head of "Mining Correspondence."]

CARN BREA MINES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In a letter, in a late Number of your valuable paper, some inquiries were made as to the affairs of this company, to which I have not at present seen any reply. It appears to me that there is a something more than meets the eye, or we should have heard aught ere this. Allow me to me to ask, whether the monthly cost is regularly paid at the mines? Whether the principal local director, who spends his time in London, instead of at the mines, is so elated with the successful issue of his speculations in this concern, Wheal Julia, Duffield, and others, that he is regardless of the interests of those who raised him to his present position? And, further, whether there is any truth in the reports abroad, as regards the pecuniary concerns of more than one who have embarked in this adventure? Rumour, with many tongues, gives strange tales here; but, in the absence of the captain, we are at a loss to guess at the truth.

Redruth, Nov. 22. AN INQUIRER.

DURHAM COUNTY COAL COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—One might be led to suppose that the affairs of the Durham County Coal Company, now that certain abuses have been exposed—the *onerade* made—the management changed, and you silent—were in a gratifying state—that the wheels ran smoothly, and that the whole of the machinery was not only of an efficient, but of an effective nature. You are not sufficiently "North" to know all our moves, or you would not have allowed the ink to dry in your pen—your vigilance to have become dormant; it, however, behoves me to apprise you (if that you are, as I am led to suppose, in total ignorance) of what we are doing, or, rather, what we are not doing, and the prospects which present themselves, and thus I may, in some measure, anticipate the report of the directors, which will be presented at our half yearly meeting in February. You are aware, Sir, that having rid ourselves of the many busy B's, we allowed others to occupy the hive, but, unfortunately, these were drones: and apathy following on active roguery, has, I fear, placed us in a position not much better than that from which we have escaped; true, there were some wasps, but they kept us on the *qui vive*, and at last we took the sting out of them, although not until after we had been severely bitten. Our position now is simply this—we have a board of management, who, possessing integrity, lack intelligence—who are men of business, but not (colliery) business men, who, meaning well, are incapable of carrying out their designs, and who think the acme of directorate legislation is to see that nobody pays twice or is twice paid; in fact, we have an honest inutile direction. There is an old saying, as to whether it is best to deal with a knave or a fool. In truth, I know not, in the present case, which is best. I trust that my fellow proprietors will, ere the hour arrives to receive the report of the directors, inquire well for themselves. Should this rouse you, MR. EDITOR, or the shareholders, to action, and awake them from their slumbering, I shall be happy to give some brief notes for consideration.

Northumberland, Nov. 22. AN ORIGINAL PROPRIETOR.

[We shall be glad to hear again from our correspondent, for we are free to confess, we are not sufficiently "North" to be up to all the "moves."]

LONDON AND BLACKWALL RAILWAY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—What, in the name of fortune, ails the directors of the London and Blackwall Railway? Are their wits paralised that they carry on such a fearful game against their own interest? Not contented with the experience they have acquired, through the insane project of raising their fares—while other conveyances were underworking them, in carrying the mass of passengers who daily travel from Blackwall to the city, and back in the evening—they have struck upon the foolish expedient of limiting the running of their trains after half-past five to starting half-hourly; so that a passenger, who arrives at their terminus ten minutes *after* the train has departed, will have to wait fifty minutes for the departure of another train. Raising the fares, in the first instance, disgusted the public so much, that a return to the old prices for the intermediate stations will not have the effect of restoring the railway to their patronage; and the restriction to the periods of starting in the evening, will unquestionably end in empty trains. If the shareholders understood their own interests, they would, in lieu of curtailing the number of daily journies, increase their number—say to six times in the hour; if not practicable, to five journies in the hour—then, by reducing the fares throughout to 4*d.* first class, and 3*d.* second, they would succeed in putting down their opposition, the omnibuses, the numbers of which have been greatly increased within the last two months, and put more on their journies, to and fro, loaded inside and out. There is work of passengers. The railway company must bid for them by reducing their fares below the cost of the omnibus, or run their trains, as they have been doing, nearly empty. It takes about six minutes to wind coals up from Blackwall to Fenchurch-street; without increasing that speed, the directors might contrive some mode of getting the passengers who arrive out of the carriages, and those who are about to start into them, in four minutes. The absurd plan of keeping the passengers in the rooms below, at the terminus, Fenchurch-street, who have paid their money and taken their checks, delays the train two minutes, at least, to assemble up the stairs to the carriages. The passengers about to start should be placed, previous to the arrival of the up-train, in a position ready to enter the carriages the moment they arrive. A hint from you to the foregoing effect may awake the energies of the directors, and thereby save the property embarked in the undertaking from destruction.

Nov. 19. A CONSTANT RAILER.

PROSPECTS OF THE GREAT WESTERN RAILWAY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—If you think the following statistical information worth inserting in your very valuable paper, your doing so will oblige T. Y. VENN.

Bristol, Nov. 19.

Prospects of the Great Western Railway, for the half-year ending December 31.

RECEIPTS.

July 31—four weeks two days	£71,400
August 28—four weeks	69,570
September 25—four weeks	67,351
October 23—five weeks	82,401
November 27—four weeks, say	46,000
December 31—four weeks six days, say	66,000
	£403,322
Surplus, 30th June	2,695
	£405,917

The receipts for October having averaged 13,080*l.* per week, and the first week in November having produced 12,330*l.*, I have assumed 11,500*l.* per week for November, and 12,000*l.* per week for December.

I am informed the long traffic from Taunton is increasing; and the goods station, at Bristol, being now nearly complete, the directors are arranging for the carriage of a large quantity of heavy goods; therefore, I think, that the receipts for the year will exceed my calculation.

The working expenses for the last half-year, as per printed report, was	£127,779
As the same number of trains are run this half, the expense must be nearly the same, except increase of Government duty, say	1,000
And for running the trains on the extension to Taunton, 26,000 miles, at 1*s.* 6*d.* per mile	£2100
Extra clerks, porters, and watchmen, say	900 — 3,000
	£130,779

A portion of the above expenses were for maintenance of way, 24,594*l.*, which, on account of the previous wet weather, was very heavy; 1479 miles are now let at an average of less than 3*l.* per mile per week; I may, therefore, reckon upon a saving in this item of nearly 10,000*l.*; I will, however, only deduct 7,779

Reducing the expenses on the present half-year to £123,000

EXPENDITURE.

Working the line and branches, say*	£123,000
Rent of Cheltenham line	8,380
Rent and toll of Exeter line	34,000
Interest on borrowed capital, 3,473,893*l.*, at 5 per cent. per ann.	£86,810
Less interest on money in hand, say	6,810 80,000
Dividend on shares, 3,015,013*l.*, at 6 per cent. per annum	180,900
Balance to be carried to next year	7,937
	£365,217

I have not noticed the reserved fund, as there appears a general desire to divide the whole of the profits, by which they may increase the dividend and carry over a larger balance to the next half-year.

The present amount of receipts and improving prospects of this great line, its superior accommodation, ease, speed, and solidity, calling forth the admiration of all who travel by it—is a sufficient reply to the parties who are constantly endeavouring to write it down—from interested motives, I have no doubt.

I have been careful in making this calculation (which I have little doubt will be borne out by the report of the directors at the next meeting), for the information and consideration of my fellow shareholders.

The present market price of the 50*l.* shares (which are all paid up) is about 62*l.*; if the next dividend should be only at the rate of 7½ per cent., they will then be worth 75*l.* per share, and if 8 per cent., 80*l.* per share, and still pay 5*l.* per cent. upon the money invested in them. I think this a very favourable opportunity for capitalists to invest, and get nearly double the interest to be derived from the funds.

Bristol, Nov. 19. T. Y. V.

SOUTHAMPTON DOCKS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to state that I have inspected the "mortgage book" of the "Southampton Dock Company," and I there see that they have received, prior to the 31st August last, but one sum of 700*l.* from one individual, and no more. I think this bears out the statement of your correspondent, who signs "T. R.," in your Journal.

Nov. 21. AN UNFORTUNATE SHAREHOLDER.

SOUTHAMPTON DOCK COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In your Journal of Saturday last, there appeared a letter from Mr. George Saintabury, the secretary of the above company, and appended to it was a note of your's, by which it appears that you very properly expect your correspondents (the correctness of whose statements Mr. Saintsbury impugns) to reply to same, Mr. Saintsbury's letter having reached you too late in the week, then to ascertain the correctness or incorrectness of your correspondent's remarks. In the first place, Mr. Saintsbury says the directors have not discharged Mr. Giles—granted, as I stated in my last, and I would not rob them of the merit of retaining him. Secondly, Mr. Saintsbury says that three of the dock walls have "*not fallen in*, and that to repair them will not cost so much as 25,000*l.*" Granted that three of them have only partially protruded from the straight line, at which they were originally built. Mr. Saintsbury affirms, that the cost of securing them will come to less than 25,000*l.*; yet I cannot grant, merely upon the very guarded assertion of Mr. Saintsbury, "that the cost of securing them has been estimated, and the work offered to be completed, at considerably less than half that sum."

The shareholders by this time ought to have the knowledge—and the dearly-bought knowledge too—that neither *estimating or offering to complete*, are equivalent to contracting at a price, with security guaranteed by bondsmen in case of failure. Mr. Saintsbury knows this well, hence I suspect his use of the vague expression—"the cost of securing them *is* estimated, and the work has been offered to be completed," &c. What I care to know is this, and this only, can Mr. Saintsbury point out the contractor, who, at considerably less than the half of 25,000*l.*, would make the walls and quays of the Southampton Dock as sound and firm as the London Docks? that is, as sound and firm as they ought to have been on the day they were built. Why, I hear the way they are to be secured is by "tying"—tyes affixed to what I should like to know? But, for argument, grant that such can be done effectually (which I do not believe) why are the proprietors to pay for it, when the directors neglect, in not taking proper security from Messrs. M'Kay and Haddon, is the cause of there being no "bondsmen" to whom to look for the money?—this, too, without even an excuse on the part of the directors, who go on taking their salaries, and do not condescend to call a meeting of the proprietary, although they admit that *the walls have partially protruded, &c.!!!* The only remaining point on which to answer Mr. Saintsbury, is one I cannot touch upon but with feelings of regret; however, I can only, by way of apology, remind him of the old Spanish proverb—"*Entre amigos honradas las cumplimientos son escusados*," and proceed with my subject.

In a former letter, having stated that the directors, "to gain a temporary end, appeared to have deviated materially from the truth," by asserting in their report of the 31st of August last, "that they had received and accepted *tenders* for loans on their debenture bonds, under their Act of Parliament," when, in truth, and in fact, they had only received one sum of 700*l.*, and that from *one* individual near Shaftesbury. Mr. Saintsbury, in his letter, contradicts my statement, by asserting that "that statement of the directors is strictly true." To have saved myself the trouble of writing the present, I wish that Mr. Saintsbury had shown in what manner it is "strictly true;" for again have I this week, in the presence of a gentleman who is a large shareholder in the company, examined the mortgage book, in which it is required that all mortgages shall be entered within fourteen days of their being granted, and it appears that the *one* mortgage alluded to for 700*l.* is the *only one* granted previous to 31st August—in fact, it is the *only one granted before or since*, excepting one dated 3*d* of the present month, for 900*l.*

Your Journal will, I trust, be always open for the elucidation of truth; therefore, the present difference with Mr. Saintsbury may be easily explained, as upon matters of opinion parties may fairly agree to differ; but with gentlemen, I respect that there ought not to be any difference as to "*facts*"—at all events, I will not suffer myself to appear in a doubtful light, because Mr. Saintsbury says, "I am instructed to inform you that the statement of the directors is strictly true," without even attempting to show how the same could be proved.

In conclusion, I beg to say, these observations are not made to disparage Mr. Saintsbury, but to draw from him such "explanation" as he can give of a seeming contradiction: he, on the one hand, having asserted that the directors' report of the 31st of August last was "strictly true," and asserting, on the other hand, upon the evidence of the "mortgage book," in his own keeping, that the same appears untrue, and that I have a right to judge from the mortgage-book, I need only mention that it is kept, under the 105th section of the Act, expressly that shareholders and mortgagees may have a means of ascertaining to what extent the company's works are mortgaged, and to show, at any time, that the 105th section of the Act has not been disregarded, as it enacts, "that the said company shall not, in any event, borrow upon mortgage, assignment, or charge as aforesaid, in such manner, or to such extent, as that more than the principal sum of 150,000*l.* in the whole shall be owing, at any one time, on mortgage, or assignment of, or as a charge upon such undertaking." Under all the circumstances, I feel assured Mr. Saintsbury will explain—he owes it to himself.

T. R.

LAW INTELLIGENCE.

MR. BANKS'S PATENT—RAILWAY WHEELS.

VICE-CHANCELLORS' COURT—NOV. 24.

GOOCH AND OTHERS *v.* BANKS.—This was an application for an injunction to restrain the defendant from the further use of his patent mode of *steeling the tires of railway wheels*. The plaintiffs went on the ground that their patent, previously obtained, gave them the exclusive use of steel for that purpose; but the facts of the case, as stated by the plaintiffs counsel, were not such as would warrant his Honour to grant an injunction.—Application, therefore, refused.

NEW PATENTS FOR NOVEMBER.

Sir John Scott Lillie, Chelsea, for certain improvements in roads.

Richard Bevan, wine merchant, Liverpool, for certain arrangements connected with the circulation of steam employed in pipes or tubes for producing heat, and the applications of such arrangements to various purposes.

John Rothwell, grocer, Great Bolton, for a certain composition and preparation to promote the ignition and combustion of coke, coal, and other combustible substances, in stoves, furnaces, and grates.

John Spinks, jun., gentleman, John street, Bedford-row, for an improved apparatus for giving elasticity to certain parts of railway and other carriages requiring the same.

Charles Smith, Newcastle-street, Strand, for improvements in the manufacture and application of bricks, tiles, and other plastic articles of surfaces, and for cements or compositions to be used with, in, and about the same, for building and other useful purposes.

Henrik Zander, engineer North-street, Sloane-street, for certain improvements in steam-engine boilers and furnaces, and in the methods of feeding and working the same; as also in the machinery for applying steam-power to propelling purposes.

THE TALACRE MINE—ALD. THOMAS WOOD.

On Saturday a full committee of aldermen assembled at Guildhall, for the purpose of determining upon the most advisable course of proceeding to be pursued relative to the inquiry into the charges made against Alderman Thomas Wood.—Mr. Wire attended as the advising friend of Ald. Thomas Wood.—Ald. Brown was unanimously called to the chair.—At the desire of Ald. Wood the doors were thrown open, and a great many strangers were present during the proceedings of the committee.—The CHAIRMAN said that he had, since the court of aldermen granted a committee to inquire into the charges against their brother aldermen, thought a great deal upon the subject, and his anxiety was naturally increased by his appointment to the situation of chairman. The committee would proceed temperately and dispassionately in the investigation, without making any allusion to what had already occurred. They were not there in the character of accusers; they brought no charge whatever against Ald. Thomas Wood, who, he trusted, and the committee trusted, would be able to show that whatever charges were made against him were destitute of foundation, and who had called for the appointment of a committee with that professed object.—Ald. T. Wood was understood to say that he had not called for the appointment of a committee, but that he had applied to the court to make inquiry into the circumstances which led to their rejection of him at the last election; and that he wished the court to adopt their own measures of inquiry.—The CHAIRMAN repeated that no charge was made by the committee, and stated that no record was to be found in the Journals of the Court of Aldermen on the subject, except that by virtue of which the committee had that day assembled. It was quite impossible for the committee to proceed in the inquiry without being supplied by Ald. T. Wood with a detail of the charges to which he had referred in his request to the court. That information must be supplied in writing, and must comprehend any charges which might have been made in any of her Majesty's courts. He had a proposition, which he thought would answer, to then read the following resolution, which he submitted might be proposed by some member who was not chairman:—"That Ald. T. Wood be requested to furnish the Town Clerk, on or before the 31st day of December, 1847, with a statement, in writing, for the purpose of the same being laid before this committee, detailing the several charges referred to in his request for investigation made to the court of aldermen on the 3d inst., distinguishing in each statement which, if any, of such charges hath or have been brought under the consideration of *any* of her Majesty's courts of law or equity, and the mode (whether by motion or otherwise) of bringing the same before, and the result of the investigation thereof by any such court." The course recommended in such a resolution was the only one which it occurred to him as advisable for the committee to adopt. Ald. T. Wood would have the opportunity of giving answers in writing to whatever charges he alluded to in his request to the court.—Sir F. LAUGIE said, he would move the resolution, of which he highly approved. He considered that it would be absolutely necessary for Ald. T. Wood to give answers to all the charges which were published against him.—Ald. WILSON said he attended the committee most unwillingly, and he would certainly be elsewhere, if his brother aldermen did not urge him to attend out of respect to the honour of the court, to his own honour, and in justice to Ald. T. Wood. He neither appeared as prosecutor nor accuser, but he had represented that charges had been made against a member of the court, and that a committee of inquiry had been moved for and refused. He could then have attended the committee, and was assured that Ald. T. Wood should have the opportunity, if he had the power, of purging himself of the effect of what had been said against him. The charges were distinctly stated, and they might have been inquired into without delay, and their truth or falsehood tested satisfactorily. He had no wish to make allusion to the past, but as he had taken a prominent part in the affair, he could not come to a vote without taking notice of the observation on his conduct made by Ald. T. Wood in addressing the livery on Michaelmas day. He availed himself of this, the first opportunity he had had, of publicly alluding to the subject. He trusted that Ald. T. Wood would adopt the only plan which could be efficacious under the circumstances in which that gentleman was placed—the production of the strongest evidence in proof of the falsehood of all the charges against him. In such a case it would be most necessary to have Ald. T. Wood and his accusers face to face.—Ald. FARRINGDON observed, that if the committee had the disposition to be accusers, they were not in a situation to call evidence. Ald. T. Wood must pursue his own course in answering the charges of the nature of which nobody was ignorant. He (Ald. Farrington) had received a book, he did not know from whom, containing those charges, and attached were the names of the parties by whom they were brought. It would be desirable to know whether those charges were to be merely answered by affidavits, or whether Ald. T. Wood would think it necessary to bring forward any further testimony in proof of their groundlessness.—Ald. T. Wood said he was ready at any time to answer any and every charge, and he courted the most searching inquiry. He did not care as to the form the committee might adopt; but he did not see why he should be called upon to charge himself, and upon paper too. He had most completely answered every charge which he had heard made against him on affidavit, and if the committee had anything more in their minds against him, he was ready to answer that. He would leave upon their table the whole of the proceedings.—The CHAIRMAN said it was quite impossible for the committee to proceed, without having the papers containing the distinct charges before them, to which the resolution referred.—Ald. WILSON intimated, that if the inquiry did not go beyond affidavits, he would have nothing at all to do with it. If Ald. T. Wood was sincere in the wish expressed for strict inquiry, that inquiry must extend to the production of other information.—The CHAIRMAN said his wish was to narrow the inquiry as much as possible, and not to listen to any idle tale. Various papers had been sent to him, but not one of them had he read, except what had been put into his hands by Ald. T. Wood himself—the judgment of the Court of Queen's Bench and Ald. T. Wood's affidavit.—Ald. T. Wood declared that it was his most earnest wish that the committee should investigate any charges which might be made against him relative to the Talacre Mine, but he wished to know what those charges were. He would fully answer them. He had, at that moment, in his possession, and he would lay before this committee, the proceedings which had taken place. (Here Ald. T. Wood produced a bag containing a very large bundle of papers). He again declared that there was no ground whatever for any imputation against him with regard to the Talacre Mine.—The CHAIRMAN begged to ask Ald. T. Wood whether, upon reading the document to which the Chief Justice of the Queen's Bench of England was represented as having said a person's conduct was liable to suspicion and improper, he would not suppose there was ground for imputation or inquiry? He (the chairman) and the committee, he was convinced, came to proceed in an impartial inquiry, and would be delighted to find the result to be favourable to him who was most interested.—Ald. T. Wood stated, that he was ready to meet and refute all charges.—The CHAIRMAN said, the resolution just proposed would enable Ald. T. Wood to give the most complete answer he was capable of making, and the committee could not proceed without receiving the written statement alluded to in the resolution.—Sir F. LAUGIE said, that he held in his hand the statement of another charge against Ald. T. Wood. It was made by a gentleman of the bar.—Ald. BROWN refused to receive it.—Sir F. LAUGIE: It was sent to me publicly by the barrister.—Ald. T. Wood: I hold in my hand a document, in which that barrister denies the truth of the statement altogether.—The CHAIRMAN then put the resolution, which was agreed to unanimously.—The Town Clerk was then requested to give notice to all the aldermen of the receipt of Ald. T. Wood's written paper, detailing the charges, &c., in order that the investigation might proceed without delay.

IMMENSE CONSUMPTION OF IRON.—In consequence of the intended junction of the Liverpool and Manchester with the Leeds and Manchester Railway, at Hunt's-bank, a distance of some 200 or 250 yards will have to be ascended by the Bolton Railway Company. It will be formed entirely of cast-iron, and will be about eighteen feet above the level of the pavement; to effect which, fifty one immense cast metal beams will be required, each weighing about seven tons, and a similar number of pillars, each weighing five tons. Besides this, the entire length and breadth of the road will have a complete cast metal flooring. The estimated weight of the whole is 1050 tons, exclusive of the weight of the wrought-iron and the rails. The railway will be formed in the centre of the street, leaving a carriage road on each side. The design is beautiful; and the work, judging from appearance, will be of the most substantial description.

GEOLOGY OF NORTH DERBYSHIRE.—An interesting paper was read by Mr. Lee before the Literary and Philosophical Society of Sheffield, on the 11th inst. It was devoted principally to the consideration of the organic remains of the Gritstone coal series, which is included between the shale subjacent to the Sheffield seam and the millstone grit, the entire range between Lower Heady and Froggatt Edge. After a very lucid explanation of the phenomena supposed to have characterised the coal seas, he concluded with an opinion that the whole of the fossil remains in that neighbourhood prove them to have been a marine deposit.

MEETINGS OF SCIENTIFIC BODIES.
IN THE ENSUING WEEK.

Society.	Place of Meeting.	Day.	Hour.
Royal Botanical	Regent's-park	Saturday	4 P.M.
Royal Geographical	3, Waterloo-place	Monday	8½ P.M.
Medical	Bolt-court, Fleet-street	Monday	8 P.M.
Society of Arts	Adelphi	Wednesday	7½ P.M.
Geological	Somerset House	Wednesday	8 P.M.
Royal	Somerset House	Wednesday	8½ P.M.
Zoological	57, Pall-mall	Thursday	8½ P.M.
Antiquaries	Somerset House	Thursday	8 P.M.
Botanical	20, Bedford-street, Cov.-g.	Friday	8 P.M.
Royal Asiatic	14, Grafton-street	Saturday	2 P.M.
Westminster Medical	Exeter Hall	Saturday	8 P.M.
Mathematical	Crispin-street, Spitalfields	Saturday	8 P.M.

PUBLIC COMPANIES.
MEETINGS.

Western Australian Company ... 52, Old Broad-street ... Nov. 29 ... 2.
Peninsular & Oriental Steam Co. 51, St. Mary-axe ... 30 ... 1.
Imperial Brazilian Mining Ass'n ... London Tavern ... Dec. 1 ... 1.
South Eastern Railway ... London Tavern ... 2 ... 1.
Mexican and South American Co. 5, New Broad-street ... 7 ... 2.
European Life Insurance Company 10, Chatham-place, Blackfriars Jan. 3 ... –

CALLS.

Hartlepool Dock and Railway .. 5l. (new shares) Dec. 1 ... As usual.
Bastenne & Gaujac Bitumen Co. 1l. per share ... 17 ... London & County Bk.
London & Birmingham R'way 1l. per share.. Jan. 16 ... As usual.

DIVIDENDS.

Anglo-Mexican Mint Company .. 12s. per share ... Offices ... Dec. 1.

CURRENT PRICES OF STOCKS AND SHARES.

The greatest activity has prevailed in the city during the week, in consequence of the exhilarating news from the east; the turn which affairs have taken, particularly with relation to China, is expected to open a field for our commercial enterprise, which will be found most advantageous to our manufacturing, as well as other interests. Consols have again experienced a rise, having reached 95, and are now quoted at 94¾; every other description of stock remains firm.

STOCK EXCHANGE, Saturday morning, Twelve o'clock.

Consols Money, 94 ⅞	Dutch, 2½ per Cent., 52¼ ⅜
Ditto Account, 95	Ditto, 5 per Cent., 101 ½
New 3½ per Cents., 101⅛ ¼	Portuguese, 5 per Cent., 36¼ 7
Reduced 3 per Cents., 94	Ditto, 3 per Cent., 21¾ 22
Reduced 3½ per Cents., 101⅛ ¼	Russian, 5 per Cent., 112½ 13½
Long Annuities, 12 7-16 9-16	Spanish, Actives, 5 per Cent., 17½ ⅝
Bank Stock, 171½ 2½	Ditto, 3 per Cent., 27⅞ ¾
Exchequer Bills, 56 58 pm.	Chili, 6 per Cent., 90 92
Belgian Bonds, 5 per Cent., 101¾ 2½	Columbian, 6 per Cent., 21 ½
Brazil, 5 per Cent., 69 0	Mexican, 5 per Cent., 30 ½
Danish, 3 per Cent., 82 ½	Peru, 17 18

PROMISSORY NOTES AND BULLION.—An account of the average aggregate amount of promissory notes, payable to bearer on demand, which have been in circulation in the United Kingdom, distinguishing those circulated by the Bank of England, by private banks, and by joint-stock banks, in England and Wales, by the banks in Scotland, by the Bank of Ireland, and by all other banks in Ireland; and of the average amount of bullion in the Bank of England, during the four weeks ending the 12th day of November, 1842:—ENGLAND: the Bank of England, 19,184,000l.; private banks, 5,184,873l.; joint-stock banks, 3,190,564l.—SCOTLAND: Chartered, private, and joint-stock banks, 2,891,060l.—IRELAND: Bank of Ireland, 3,154,000l.; private and joint-stock banks, 1,120,879l.—Total, 36,938,000l. Bullion in the Bank of England, 9,917,000l. HENRY L. WICKHAM.

Stamps and Taxes, Nov. 25.

[From our own correspondents.]

PARIS, Nov. 24.—3 per Cents., 119f. 8c.; 5 per Cents., 80f. 50c.; Bank Actions, 3,307f.; Rente de Naples, 108f. 60c.; Romans, 104; Spanish Actives, 23; Belgian 5 per Cents., 105, 105¾; ditto 5 per Cents., 104¾, 104½; Belgian Bank, 805f. 25c.; Mexican Loan, 370f.—St. Germain Railway, 805f. 0c.; Versailles, R. B., 305f. 75c.; L. B., 93f. 75c.; Rouen, 193f. 25c.; Orleans, 520f. 75c.; Strasburgh to Bâle, 198f.—Exchange on London, one month, paper, 25f. 50c.; money, 25f. 25½c.; three months, paper, 25f. 47½c.; money, 25f. 45c.

LATEST PRICES OF IRISH STOCKS.—3 per Cent. Consols, 93⅝l. to 93¾l.; 3½ Stock, 100⅝l.; ditto New, 1830, 100¼l.; 3½ per Cent. Debentures, 93¾l.; Bank Stock, 178⅝l.—Kingstown Railway, 9¼l.; Dublin and Drogheda, 7¼l.—Hibernian Bank, 29l.; Royal Bank, 6½l.; Provincial Bank, 40l.—City of Dublin Steam Company, 87l.; ditto stock, 100l., 4½l.—Steam Ship Building Company, 49½l.; British and Irish ditto, 5½l.—National Insurance Company, 18½l.; Patriotic, 7½l.—Mining Company of Ireland, 12¾l.; Wicklow Copper Mines, 11½l.

HULL, THURSDAY.—The news from India and China has already favourably affected the share market; and it seems a pretty generally received opinion that it will act as a lever of improvement in every department of business and finance. The spirit of commercial activity once aroused, amends will soon be made for the long-continued period of depression we have experienced; in fact, the suggestion may be hazarded, that, for the last few months, the lead has merely required being taken by some important branch of our trade, for want of confidence has, unquestionably, been the chief cause of the lethargy that has prevailed—money having constantly been plentiful—plentiful, indeed, to excess. All we can say is, we trust the improvements, already felt so sensibly in the cotton market, may prove epidemical. Prices of shares have been tolerably supported during the week; and, at our present writing, there is a decidedly better feeling for most railway stocks.—In consequence of the superabundance of money seeking investment, the various lines have had an opportunity of getting in, on debenture and loan, the amounts they respectively wanted; and it would now not be an easy task to place a heavy sum on a mortgage of this kind, at more than 4½ per cent.—Bank Stock will require some very powerful stimulus to set it in motion; and we regret this must apply to the well, in addition to the ill, conducted establishments—so much has prejudice, assisted by bad management, interwoven them. The last prices are:—Birmingham and Derby, 46l. to 47l.; Edinburgh and Glasgow, 50l. to 51l.; Great North of England, 58l. to 60l.; Hull and Selby, 53¼l.; Leeds and Selby, 100l. to 101l.; London and Birmingham, 183l. to 187l.; London and Brighton 31½l. to 32l.; Manchester and Leeds, 60l. to 61l.; Midland Counties, 61l. to 62l.; Newcastle and Carlisle, 86l.; Northern and Eastern, 20l. to 21l.; North Midland, 61l. to 63l.; South Eastern, 22l. to 23l.; York and North Midland, 9½l.; Yorkshire District Bank, 6l. to 6½l.; Hull Banking Company, 5½l.; Hull Dock Company, 100l.; Hull Gas, 25l. to 26l.; Hull Flax and Cotton Mills, 20l.; Hull Marine Insurance, 110l.

NEWCASTLE, THURSDAY.—Great North of England Railway shares maintain their advance in price, whilst Newcastle and Carlisle and Brandling Junction Railway shares are offered at lower rates.—North of England Joint-Stock Bank, 15l.; Northumberland and Durham District, 7½l.; Newcastle, Shields, and Sunderland Union, 16l.; Newcastle upon Tyne Joint-Stock, 3l.; Newcastle Commercial, 8½l.; Sunderland, 32l.; Darlington District, 4l.; Carlisle City and District, 20l.; Carlisle and Cumberland, 6½l.; Stockton and Durham County, 3.—Newcastle and Carlisle Railway, 86l.; Newcastle and North Shields, 18l.; Brandling Junction, 33l.; Durham and Sunderland, 18l.; Clarence, 1½l.; Hartlepool and Stockton, 21l.; Hartlepool Dock and Railway, 17½l.; Bishop Auckland and Weardale, 33l.; Great North of England, 58l.—Newcastle Union Shipping Company, 3l.; Port of Newcastle, 11l.; London, Newcastle, and South Shields, 11.; Gateshead and Tyne, 17l.—North and South Shields Steam Ferry, 11l.—Newcastle Subscription Water Company, 5l.—Newcastle and Gateshead Union Gas Company, 7½l.—Durham County Coal Company, 5l.; Northern Coal Mining Company, 1l.

EDINBURGH, THURSDAY.—Edinburgh and Glasgow Railway, 47½l.; Dalkeith and Edinburgh, 30l.; Glasgow and Greenock, 11l.; Glasgow and Garnkirk, 53l.; Glasgow and Ayrshire, 41l.; Wishaw and Coltness, 5l.; Dundee and Arbroath, 18l.; Arbroath and Forfar, 22.—Bank of Scotland, 161½l.; Royal Bank, 161l.; British Linen Company, 216l.; Commercial, 101l.; National, 112l.; Edinburgh and Leith, 4l.; Glasgow Union, 61½l.; Western Bank of Scotland, 71l.; City of Glasgow, 4½l.—Caledonian Fire and Life Insurance, 9l.; Hercules Fire, 12¼l.; North British Fire and Life, 15½l.; Standard Life, 2l.—Edinburgh Gas, 10½l.; Edinburgh and Leith Gas, 2⅛l.—Forth and Clyde Canal, 14[illegible].

BRISTOL, THURSDAY.—The highly important and satisfactory news from China and India has had the effect of rendering our market firm at my quotations, but very little stock is offering, being held for an advance, which may be reasonably expected upon a revival of trade—consequently, few transactions have been reported.—Great Western Railway, 85l. to 86l.; ditto, halves, 62l. to 62½l.; ditto, fifths, 2l. to 2½l.; Bristol and Exeter, 53½l. to 55l.; Bristol and Gloucester, 15½l. to 17l.; Birmingham and Gloucester, 4l. to 5l.; Birmingham and Derby, 4l. to 4½l.; Cheltenham Union, 2l. to 3l.; Taff Vale, 3l. to 32½l.; London and Brighton, 32½l. to 33l.; Eastern Counties, 9l. to 9½l.—Bristol Gas Company, 33l. to 34l.; Clifton, 30l. to 31l.

LIVERPOOL, FRIDAY.—Chester and Birkenhead Railway, 16½l.; Eastern Counties, 9l.; Edinburgh and Glasgow, 49¼l.; Grand Junction, 191l.; Great Western, 84½l.; Great North of England, 60l.; Lancaster and Preston, 33l.; Liverpool and Manchester, 193l.; London and Birmingham, 184l.; London and South Western, 60l.; London and Brighton, 32l.; Manchester, Bolton, and Bury, 34l.; Manchester and Birmingham, 25l.; Manchester and Leeds, 60l.; Midland Counties, 62l.; North Midland, 61l.; North Union, 34½l.; Paris and Rouen, 32¾l.; South Eastern, 23l.; York and North Midland, 16l.—Borough Bank, 16l.; Bank of Liverpool, 26¼l.; Commercial, 21½l.; Liverpool Banking Company, 13l.; Manchester and Liverpool District, 9l.; North and South Wales, 32l.; Royal, 20l.; Union, 7l.—Fire and Life Insurance, 2½l.; Marine Assurance, 1½l.—Andrews Carrying Company, 1l.; Ormskirk's Steam Company, 11.; Gas Light Company, 2 6l.; New Gas and Coke Company, 12l.—Birmingham Dock, 26½l.—Bootle Water Works, 5½l.; Liverpool and Harrington Water Works, 9l.

BIRMINGHAM, THURSDAY.—London and Birmingham Railway, 183l. to 185l.; London and Brighton, 32l. to 33l.; London and South Western, 60l. to 61l.; Great Western, 83l. to 85l.; Birmingham and Derby, 47l.; Birmingham and Gloucester, 40l. to 45l.—Birmingham Banking Company, 27l. to 28l.; Birmingham and Warwick Canal, 34l.; Birmingham Water Works, 21l.; Old Union Mill, 1½l.

THE LONDON GAZETTE—BANKRUPTS.

TUESDAY.—J. Hewitt, Chatteris, Cambridgeshire, scrivener—J. Stubbs, Soham, Cambridgeshire, grocer—W. and J. Barnes, Uxbridge and Hillingdon, Middlesex, seed crushers—Joseph Phillips, Horsemonger-lane, Southwark, draper—[illegible] Mount, Fetter-lane, Holborn, Middlesex, grocer—J. Walton, [illegible], commission agent—R. G. Pyne, Birmingham, baker—T. Nightingale, [illegible], mill manufacturer—J. Lawton, Stafford, [illegible]—C. Fish, Lincoln, [illegible]—J. Parkin, [illegible], coach builder.

FRIDAY.—R. S. Watson, Cornhill, [illegible]—J. Lewis, Queen's-[illegible], [illegible]—[illegible]

cheesemonger—H. Clepham, Liverpool, woollen draper—G. Swires, Birstall, Yorkshire, merchant—J. Ashwell, Salford, Lancashire, grocer—W. Barton, St. Helen's, Lancashire, watch movement maker—T. Holyland, Manchester, woollen cloth manufacturer—T. Perry, Kirkdale, Lancashire, builder—J. Parry, Frankfort-street on Ponygiddle, Montgomeryshire, mercer—P. Little, Blackburn, Lancashire, currier—J. Wilkinson, Manchester, innkeeper—J. Green, Leeds, victualler—R. Bellingham, Wem, Shropshire, bootmaker—J. Webster and Mary Pickles, Morley, Yorkshire, cloth manufacturers—R. Loosemore, Tiverton, Devonshire, scrivener—J. Wyatt, Plymouth, upholsterer—J. Pepper, Wootton-under-edge, Gloucestershire, tailor—E. Lane, Cirencester, Gloucestershire, edge tool maker—W. Castle, Wanborough, Wiltshire, sheep dealer.

SALE OF COPPER ORES IN CORNWALL.

Sampled Nov. 9, and sold at Pearce's Hotel, Truro, Nov. 24.

Mines.	Tons.	Price.	Purchasers.	Mines.	Tons.	Price.	Purchasers.
Consols	136	4 17 6	Freemans.	Trethellan	51½	5 7 6	P. Grenfells.
ditto	132	4 15 6	Vivians.	ditto	51½	5 7 6	Williams.
ditto	122	4 10 6	Freemans.	ditto	97	2 11 6	Vivians.
ditto	104	7 9 6	—	ditto	80	3 12 6	—
ditto	98	6 6 6	Williams.	ditto	56	4 16 6	P. Grenfells.
ditto	80	5 8 6	Freemans.	Fowey C.	80	4 17 6	Williams.
ditto	47	4 6 6	Vivians.	ditto	58	6 0 6	—
ditto	45	3 9 6	Freemans.	ditto	80	5 4 6	—
ditto	41	6 16 6	Williams.	West Jewel	56	6 5 6	—
ditto	32	5 11 6	Freemans.	ditto	64	5 5 6	—
ditto	12½	3 19 6	Vivians.	ditto	21½	4 11 6	Mines Royal
ditto	12½	3 19 6	Freemans.	ditto	21½	4 11 6	Vivians.
United M.	125	6 6 6	Williams.	ditto	20	7 8 6	—
ditto	90	4 5 6	Vivians.	Treleigh C.	26½	4 0 6	P. Grenfells.
ditto	87	4 16 6	—	ditto	26½	4 0 6	Williams.
ditto	82	6 2 6	P. Grenfells.	ditto	52	3 1 6	—
ditto	77	4 4 6	—	ditto	49	5 8 6	—
ditto	74	5 8 6	Williams.	Treasavean	41½	3 4 6	Vivians.
ditto	60	5 9 6	P. Grenfells.	ditto	41½	3 4 6	Williams.
Hallenbeg.	114	5 16 6	Vivians.	ditto	62	3 15 6	P. Grenfells.
ditto	104	2 13 6	—	Wh. Ellen	72	5 10 6	Mines Royal
ditto	101	4 9 6	—	ditto	50	5 14 6	—
ditto	72	4 2 6	Nevill & Co.	ditto	114	7 6 6	P. Grenfells.
ditto	41	6 15 6	Vivians.	ditto	114	7 6 6	Williams.
ditto	15	7 17 6	—	W. Caradon	110	5 7 6	Vivians.
S. Caradon	67½	6 7 6	English Co.	Penstruthal	32	2 16 6	Williams.
ditto	67½	6 7 6	Williams.	ditto	24	8 2 6	—
ditto	90	5 5 6	English Co.	Grambler	25	6 4 6	English Co.
ditto	49½	5 9 6	—	ditto	5	4 4 6	P. Grenfells.
ditto	49½	5 9 6	Williams.	Martin's ore	16	2 3 6	Williams.
ditto	20	4 5 6	Mines Royal	Phoenix M.	15	13 15 6	Vivians.
ditto	7	4 10 6	—	Wh. Prosper	3	1 10 6	P. Grenfells.
ditto	7	4 19 6	Williams.				

TOTAL PRODUCE.

Mine	Tons	£ s. d.	Mine	Tons	£ s. d.
Consolidated	654	£3516 3 6	Treasavean	145	£490 13 0
United Mines	612	3087 16 0	Wh. Ellen	145	708 10 6
Hallenbeagle	447	1852 11 6	West Caradon	110	591 5 0
South Caradon	374	2167 19 6	Penstruthal	56	261 0 0
Trethellan	330	1467 8 0	Wh. Grambler	30	176 2 6
Fowey Consols	267	1382 1 6	Martin's ore	16	39 3 0
West Wh. Jewel	232	1260 19 6	Phoenix Mines	15	206 5 0
Treleigh Consols	154	686 19 6	Wh. Prosper	3	4 10 6

Average standard, 108l. 11s.—Average produce, 7¼.—Average price, 5l. 2s. 6d.—Quantity of ore, 2791 tons.—Quantity of fine copper, 273 tons 7 cwt.—Amount of money, 19,339l. 17s. 6d.—Average standard of last sale, 106l. 18s.—Average produce, 7¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	162½	£895 12 9
English Copper Company	219	1264 11 9
Vivian and Sons	1130¾	5107 4 0
Freeman and Co.	531¾	2891 10 9
P. Grenfell and Sons	447½	2560 11 0
Sims, Willyams, Neville, Druce, and Co.	72	795 4 0
Williams, Foster, and Co.	1166	6585 13 9
Total	2791	£19,339 17 6

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—East Wheal Crofty, &c., 740; Camborne Vean, &c., 316; United Hills 208; Fowey Consols, 283; Dolcoath, 290; South Wheal Basset, 252; East Pool 245; Wheal Trowavas, 210; Tretoil, 117; Wheal Harriet, 115; Tregothnan Consols 55; Tregollan, 53; Wheal Penrose, 45; Wheal Plenty, 17; Wheal Comfort, 12.—Total, 2631 tons.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—Wheal Friendship, 423; Wheal Virgin, 397; Par Consols, 281; Wheal Darlington, 214; Fowey Consols, 200; Levant, 180; Botallack, 174; Harvey's Ore, 175; Providence Mines, 163; Great Work, 97; Brewer, 78; Wheal Providence, 65; Wheal Curtis, 52; Loscavo, 22; Wheal Chippendale, 16; South Wheal Neptune, 17; Wheal Mary, 11; Great Wheal Fortune, 10; Wheal Rodney, 5.—Total, 2548.

SALE OF COPPER ORES AT SWANSEA.

Copper ores for sale November 30.—Chili 111, ditto 97, ditto 76, ditto 42, ditto 34, ditto 23, ditto 166, ditto 89—Knockmahon 94, ditto 60—Llandidno 90—Phoenix 36, ditto 35—Connoree 45, ditto 6—Llwydd 16, ditto 16, ditto 7—Vine Stag 17.—Total, 974 tons.

WORK PERFORMED BY CORNISH ENGINES.

The number of pumping-engines reported for the month of Oct. is 41—the quantity of coals consumed being 2410 tons, lifting, in the aggregate, 23,000,000 tons of water 10 fathoms high—the average duty of the whole is, therefore, 51,000,000 lbs. lifted 1 foot high by the consumption of 1 bushel of coal.

LATEST CURRENT PRICES OF METALS.
LONDON, NOVEMBER 25, 1842.

	£ s. d.	£ s. d.		
SPELTER—Foreign, ton 20 15 to	20 0 0		COPPER—Old ... per lb.	8½d. 9d.
„ For delivery .. 20 0 0	20 10 0		„ Cake p. ton 0 0 0 to	85 0 0
ZINC—English sheet .. 0 0 0	41 0 0		„ Pot. cake .. 82 0 0 to	85 0 0
QUICKSILVER .... per lb.	0 4 0		„ tile .. 80 0 0 to	82 0 0
IRON—English bar, &c. .. p. ton	5 10 0		TIN—English, blocks, &c. cwt.	3 3 0
„ Nail rods 0 0 0	6 5 0		„ „ bars 0 0 0	3 7 0
„ Hoops 0 0 0	7 10 0		„ Foreign, Banca .. 0 0 0	3 6 0
„ Sheets 0 0 0	8 10 0		„ „ Straits .. 0 0 0	3 2 0
„ Cargo in Wales .. 4 17 6	5 0 0		„ „ Peruvian 2 8 0	2 10 0
„ Pig, No. 1, Wales 3 15 0	4 0 0		Tin plates, No. IC. p. box 1 6 6	1 10 0
„ No. 1, Clyde 0 0 0	2 15 0		„ „ No. IX. 1 12 6	1 16 0
„ Pot, Swedish .. 11 5 0	11 10 0		„ wasters ½s. p. box less	
„ Dannora, ccnd	19 0 0		LEAD—Sheet milled .... p. ton	16 5 0
„ „ por	—		„ Shot, patent	22 0 0
„ „ Gourieff	14 0 0		„ Red	22 0 0
„ „ Archangel	—		„ White	24 0 0
STEEL—Swedish keg ... p. ton	17 10 0		PIG-LEAD—English .. 0 0 0	17 0 0
„ Faggot .. 0 0 0	16 0 0		„ Spanish	17 5 0
COPPER—English sheathing .. 9d. 9½d. 10d.			„ American .. 0 0 0	17 0 0

[From the Midland Counties Herald of Thursday.]

The market for metals is still much depressed, but the intelligence from the east is expected to favour the trade, although no effect has been yet produced. British iron is at the lowest rates, and the only change is that spelter is in better demand, and the price firm at 21l. per ton. Spanish lead has been sold at 17l. 10s. per ton, but that price has not been subsequently sustained.

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the week ending Thursday last:—

Silver coin to Hamburgh .... 3,000 ounces.

COAL MARKET, LONDON.

MONDAY.—Prices of coals per ton at the close of the market:—Adair's Main 16—Bell Robson's Hartley 16—Bubble's West Hartley 16 6—Carr's Hartley 17—Holywell Main 17—Nelson's West Hartley 16 6—New Tanfield Moor 16 6—Ord's Redheugh 15 6—Pontop Windsor 17 6—Ravensworth's West Hartley 16 6—Tanfield Moor 16 6—Townley 17—Wylam 16 6—Wall's End Clennell 16 6—Braddyll's Hetton 18 6—[illegible] 17 6—Hedley 17—[illegible] 16 6—Northumberland 17 6—[illegible] 21 6—Hetton 21, to 21 3, to 21 6—[illegible] 19 6—Stewart's 21 6—[illegible] 21 6—[illegible] 20 6—Lambton 21 6—Pemberton 19 6—Hinchliffe 19 6—Haswell's? [illegible]—Hough Hall 21 3—[illegible] 21 6—Quarrington 19 6—Riddell's? [illegible]—Whitwell? [illegible] Gibson's? [illegible]—[illegible]—Ships arrived, 18.

WEDNESDAY.—Adair's Main 16—Bell Robson's Hartley 16—Carr's Hartley 16 6—Bubble's West Hartley 17 6—Holywell Main 17—[illegible] Main 17 6—Nelson's West Hartley 16 6—Ord's Redheugh 15 6—West Wylam 16 6—Pontop Windsor 17 6—Wall's End Clennell 19—Hilda 17 6—Braddyll's Hetton 21 6—Hetton 21 9 to 21—Lambton 21 6 to 20 6—[illegible] 19 6—Russell's Hetton 21 6 to 21—Stewart's 21 3—Whitwell 21 6—Adelaide 20 6—Bassett 19—[illegible] Tees 19 6—South Durham 19—Tees 20 6—Cowpen Hartley 16 6—Howard's West Hartley Netherton 16 6—Hartley 16 6—Ships arrived, 165.

FRIDAY.—Nelson's West Hartley 16 6—New Tanfield Moor 16 6—West Wylam 16—Wylam 16—Wall's End Braddyll and Co. 19—Hilda 17 6—Bainbridge 18 6—Braddyll's Hetton 21—Hetton 21—Lambton 21 6—Stewart's 21—Whitwell 21 6—Cassop 20—Eden 19—Haswell 21—[illegible] Tees 19—Howard's West Hartley Netherton 16 6—Howard's Hedley? 6 6—[illegible]—Ships arrived since last day, 45.

PRICES OF MATERIALS IN CORNWALL,
AS SUPPLIED AT THE PRINCIPAL MINES IN THE FOLLOWING MONTHS.

	384	386		384	386
Common iron, per cwt.	7s 6d	6s 6d	Iron-wire sieves, each	2s 6d	2s 6d
Half-inch square ditto	9 0	7 6	Iron-wire work, per foot	6	1 6
Best tough whim chain	28 0	28 0	Board nails, per cwt.	14 0	14 0
Boiler plates	13 6	13 0	Half-board ditto, per 1000	5 0	5 0
Hoop iron	10 6	12 0	Hatch ditto	2 3	2 3
Nail rods	9 9	9 9	Half-hatch ditto	3 6	3 6
Miners' shovels	30 0	30 0	Linseed oil, per gallon	2 9	2 9
Charcoal iron	13 0	14 6	Rape ditto	4 6	4 6
Gunpowder, per 100 lbs.	40 0	40 0	Birch, per foot	1 7	[illegible]
Leather, per lb.	1 10	1 10	Pine,	1	[illegible]
Coals, per ton, at quay	11 0	10 6	Sheet lead, per cwt.	23	[illegible]
Candles, per dozen lbs.	5 6	5 6	Barrow brads	1[illegible]	[illegible]
Tallow, per cwt.	42 6	46 6	H 2 steel (112lbs.)	2[illegible]	[illegible]
Ropes	40 0	40 0	2s. nails	16	[illegible]
Flat ropes	46 0	44 0	Pick hilts	1	[illegible]
Hemp	0 4½	0 4½	Shovel hilts	1	[illegible]
White yarn, per cwt.	40 0	40 0	White ground lead	28 0	[illegible]
White rope	42 0	42 0	Red lead	26 0	26 0
Brass-wire sieves, each	3 5	3 5	Best miners' candles	11 6	11 6
Ditto machine	13 0	13 0	Blistered steel	40 0	40 0

** The figures at the top of the columns refer to months—1 Jan., 2 Feb., &c.

PRICES OF MINING SHARES.

A little spirit has shown itself among the buyers in foreign mines, a very slight depression in price having taken place since our last. Bolanos scrip have been done at 9, those having been in bad odour in the market, without any ostensible cause, a letter from a correspondent will be found in another column, as also the mine report, which may be considered of a very satisfactory nature.

BRITISH MINES.				BRITISH MINES—continued.			
Shares.	Company.	Paid.	Price	Shares.	Company.	Paid.	Price
100	Anglesey	5	—	6,000	Tin Croft	7	5
4,000	Bedford	3	1½ 2	128	Trewavas	—	120
4,000	Binner Bridge	5	—	179	Treviskey and Barrier	—	30
100	Botallack	175	300	96	Treasavean	—	1300
20,000	British Iron	70	6 dis	120	Trethellan	—	170
8,000	Blaenavon	50	11½	4,000	United Hills	5	5½
128	Brewer	—	100	6,000	Wicklow Copper	5	1
70	Budnick	—	20	3,845	West Wheal Jewel	10	7
1,000	Carn Brea	—	100	120	West Trethellan	25	25
5,000	Con. Treloil Mining Ass.	4	1½	50	Wheal Vor	300	300
2,000	Cornubian Lead Co.	2	2	1,000	West Carbery	15	12
5,000	Cornwall Great United	10½	½		FOREIGN MINES.		
512	Cook's Kitchen	—	30				
112	Charlestown	—	200	5,000	Alten Mining Company	13½	4
128	Cregg Braws	40	335	10,000	Anglo Mexican Co.	100	14
128	Coosown	15	75	3,374	Do. Subscription	25	2½ 3
10,000	Durham County Coal Co.	37	9	2,000	Bolanos	150	42
200	Diamond	5	6		Ditto Scrip	15	9
128	East Pool	—	360	10,000	Brazilian Imperial	21	9½
100	Great Consols	97	600	10,000	Bolivar	20	½
10,000	Hibernian	12½	2¼	10,000	Ditto Scrip	10	2
1,000	Holmbush	14	46	10,000	Cata Branca } Brazilian	4½	—
2,000	Isle of Sark (Guernsey)	11	6	10,000	Concelçao } Co.	4	—
60	Levant	—	450	12,000	Cobre Copper Company	40	20
20,000	Mining Co. of Ireland	7	13¼	8,500	Colombian Co. regis.	55	2
128	Mostyn Mines	100	—	10,000	Copiapo Mining Co.	13½	9¾
70	North Roskear	—	300	20,000	General Mining Asso.	20	4
3,000	Polberou Consols	10	5	5,451	Mexican Company	50	1
10,000	Rhymney Iron	50	10½	12,000	Mocaubas and Cocaes	25	4½
100	Rosewall Hill	100	100	14,552	{ Real del Monte, regis.	63½	1½
128	South Caradon	—	850		{ Do. unregistered	—	2¼
600	South Towan	10	1		Ditto Loan Notes	150	50
64	South Wheal Basset	—	300	7,000	Royal Santiago	10	3¼
87	Spearn Moor	70	100	11,000	St. John d'el Rey	15	2¼
155	Tregollan	—	20	60,000	United Mexican	40	1½
4,000	Treleigh Consols	5	1½		Black Scrip, add'l capital	5	1½
6,000	Tamar Consols	3	2¼		Red New Scrip	2½	3

RAILWAY SHARE LIST AND TRAFFIC RETURNS.

Much confidence appears now to be placed in this description of investment, and the buoyancy of prices which we noticed in our last has maintained itself during the week, and, in consequence, there has been an evident disposition to sell; prices have remained firm, and, in some, we can quote a rise of from 10s. to 1l. per share, and London and Birmingham have realised 185l. Two or three country meetings have lately been held, at which a disposition appears among the shareholders to see more closely to the proper management of their affairs, and the expression of this feeling appears to have had its effect on the market. The following are the closing prices:—

Line.	Entire Lgth.	Now Open.	Present actual cost.	Pd. on Share.	Val. of Share.	Last week's Returns.
Arbroath and Forfar Railway	15	15	£ 181,64	25	22	£166 3 4
Birmingham & Derby Junc.	48	38½	803,544	100	46½	1160 8 9
Birmingham and Gloucester	52½	51	1,013,723	100	40	1640 16 6
Brandling Junction	25	25	442,694	45	—	670 3 9
Chester and Birkenhead	14½	14½	456,684	50	20	355 11 6
Dublin and Kingstown	6	6	333,298	100	77½	581 18 1
Dundee and Arbroath	16½	16½	134,884	25	20	106 19 9½
Eastern Counties*	126½	17½	1,476,170	28	9¼	794 4 7
Edinburgh and Glasgow	46	46	1,283,234	50	49½	1914 6 7
Glasgow and Ayr	51	40	696,545	45	40	944 15 4
Glasgow and Paisley Joint	22½	22½	300,000	20	20	364 11 1
Gd. Junc. & Chester & Crewe	115½	115½	2,192,647	100	172	6451 12 9
Great North of England	75	45	1,000,000	100	62½	1087 9 2
Great Western	118	118	5,299,644	65	84½	10169 12 8
Hayle	16	16	125,000	100	—	239 7 9
Hull and Selby	31	31	400,000	50	53½	968 3 4
Lancaster & Preston Junc.	20½	20½	380,000	42½	27½	
Liverpool and Manchester	31	31	1,419,000	100	193	3548 17 11
London and Birmingham	112½	112½	5,714,967	90	185	15008 15 9
London and Blackwall	3½	3½	867,000	25	3¾	436 0 11
London and Brighton	46	46½	2,009,500	50	33½	2187 6 3
London and Croydon	10½	10½	552,302	13¾	9½	300 14 10½
London and Greenwich	3¾	3¾	700,000	20	5	623 6 8
London and South Western	85	77	2,360,687	46½	60	5106 12 1
Manchester, Bolton, & Bury	10	10	779,800	50	55	685 11 6
Manchester & Birmingham	45	5	1,116,912	40	27½	2032 11 1
Manchester and Leeds	50	50	2,529,500	70	60	4182 9 11
Midland Counties	57	57	1,449,700	100	62	2250 12 3½
Newcastle and Carlisle	60½	60½	730,000	100	86	1431 12 8
Newcastle and N. Shields	7	7	232,477	50	44	338 16 1
Northern and Eastern†	32½	14½	850,913	45	20½	1012 12 6
North Midland	72½	72½	2,920,987	100	62	2652 17 3
North Union‡	23	23	800,000	75	79½	580 15 11
Preston and Wyre	19½	19½	270,000	50	30	128 3 7
Sheffield and Manchester	40	7	391,327	63½	32½	157 14 8
South-Eastern	67	45	1,575,458	50	22½	1119 12 4
Taff Vale	30	30	589,710	100	—	550 6 9
Ulster	25	8	229,245	22½	—	361 8 11
York and North Midland	35	29	445,500	50	91¼	1466 16 4

* Including Northern and Eastern Railway toll. † Rent and toll to Eastern Counties (about 150l. per week) included in the returns. ‡ The Liverpool and Manchester toll is deducted.

JOINT-STOCK BANKS.

We have nothing particular to report on Joint-Stock Banks, very little has been done, and the prices remain firm.

Shares.	Company.	Paid.	Price	Shares.	Company.	Paid.	Price
15,000	Australasia	40	32½	20,000	Liverpool Borough	10	10
20,000	Birmingham	10	10½ 9	25,000	Ditto Bank of	12½	26
20,000	British N. American	40	39½	12,000	Ditto Banking Co.	10	9½
16,000	Chelten. & Glouces.	5	0	20,000	Ditto Commercial	10	17
100,000	Commercial of Eng.	5	—	2,000	Ditto Royal	100	40
1,000	Commer. of London	100	173	100,000	Manch. & Liver. Dis.	15	10
20,000	Colonial	25	17½	100,000	Manchester	10	4
20,000	East of England	10	7½	20,000	Manchester & Salford	10	10
16,000	Gloucestershire	10	20¾	20,000	National of Ireland	17½	10
4,000	Ionian	20	24	10,000	Natl. Provl. England	35	40
10,000	Leeds Banking Co.	15	19	60,000	North & South Wales	10	4
20,000	Leeds & West Riding	6¼	10	50,000	Provincial of Ireland	25	42
20,000	London & Westminst.	20	27½	20,000	South Lancashire	7½	6
60,000	London Joint-Stock	10	11½	10,000	W. of Eng. & S. Wales	12½	17
20,000	London and County	10	9	20,000	Union of Australia	25	22
10,000	Liverpool Albion	20	20½	60,000	Union of London	10	10

MISCELLANEOUS.

In Miscellaneous property so little has been done that we have no particular remarks to make. The following are the prices, which are, with scarce any difference, the same as last week:—

Shares.	Company.	Paid.	Price	Shares.	Company.	Paid.	Price
10,000	Anglo-Mexican Mint	10	12¾	1,000	Lon. Cem. Sale Rooms	[illegible]	[illegible]
10,000	Anti Dry-Rot	10½	2	1,000	London Corn Exch.	[illegible]	[illegible]
10,000	Asphalte (Claridge)	4	½	6,000	London Cemetery	[illegible]	[illegible]
10,000	Assam Tea Company	12s	4½	3,000	London Cemetery	[illegible]	[illegible]
10,000	Austral. Agricultural	26l.5s.	25	8,000	Lon. Rever. Int. Soc.	[illegible]	[illegible]
12,000	Bitumen Bastenne	5	1	15,000	Mot. Pat. Wood Paving	3	[illegible]
10,000	Ditto Pyimont	2	1	20,000	Mexican & S. American	7	[illegible]
4,000	Brit. Amer. Land Co.	30	9½	—	New Brunswick Ld.	[illegible]	[illegible]
4,700	Brit. Loan & Dis. Inst.	[illegible]	22	—	Peninsular & Oriental	[illegible]	[illegible]
5,000	Brit. Book & Pat. Saft.	25	32	1,587	Rever. Int. Society	[illegible]	[illegible]
3,213	Canada Land Co.	32½	32	21,000	Royal Mail Steam Pck.	[illegible]	[illegible]
5,000	E. C. of Cro. Anc. Deb.	20	18	2,000	Shell's Iron Foundry	[illegible]	[illegible]
4,000	Dantzwick Patent Salt	25	1½	14,000	South Australian	[illegible]	[illegible]
23,700	Equitable Rever. Ins.	50	37	5,000	Ship Owners' Towing	7½	[illegible]
8,000	Gen. Steam Navig.	14	12½	4,000	Thames Tunnel	[illegible]	[illegible]
3,000	Gen. Rever. Int. Soc.	100	95	10,000	Van Diemen's Land	[illegible]	[illegible]
2,000	Hungerford Market	100	35½	4,000	W. Lon. & Wester. Cm.	[illegible]	[illegible]

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